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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2009-0366; FRL-9482-9]

**Approval of Air Quality Implementation Plans; California; South
Coast; Attainment Plan for 1997 PM_{2.5} Standards**

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving in part and disapproving in part state implementation plan (SIP) revisions submitted by California to provide for attainment of the 1997 fine particulate matter (PM_{2.5}) national ambient air quality standards in the Los Angeles-South Coast area (South Coast). These SIP revisions are the South Coast 2007 Air Quality Management Plan (South Coast 2007 AQMP) (revised 2011) and South Coast-related provisions of the 2007 State Strategy (revised 2009 and 2011). EPA is approving the emissions inventory; reasonably available control measures/reasonably available control technology demonstration; the reasonable further progress and attainment demonstrations and associated air quality modeling; and the transportation conformity motor vehicle emissions budgets. EPA is also granting California's request to extend the attainment deadline for the South Coast to April 5, 2015 and approving commitments to measures and reductions by the South Coast Air Quality

Management District and the California Air Resources Board.

Finally, we are disapproving the SIP's contingency measures and issuing a protective finding under 40 CFR 93.120(a)(3), and we are rejecting the assignment of 10 tons per day (tpd) of nitrogen oxide (NO_x) reductions to the federal government.

DATES: Effective Date: This rule is effective on [FEDERAL REGISTER OFFICE: INSERT DATE 60 DAYS FROM DATE OF PUBLICATION].

ADDRESSES: EPA has established docket number EPA-R09-OAR-2009-0366 for this action. The index to the docket is available electronically at <http://www.regulations.gov> and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

Copies of the SIP materials are also available for inspection in the following locations:

- California Air Resources Board, 1001 I Street, Sacramento, CA 95812
- South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, CA 91765.

The SIP materials are also electronically available at <http://www.aqmd.gov/aqmp/07aqmp/index.html> and <http://www.arb.ca.gov/planning/sip/2007sip/2007sip.htm>.

FOR FURTHER INFORMATION CONTACT: Wienke Tax, Air Planning Office (AIR-2), U.S. Environmental Protection Agency, Region IX, (415) 947-4192, tax.wienke@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

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I. Summary of EPA's Proposed and Final Actions on the 2007 State Implementation Plan for Attainment of the 1997 PM_{2.5} Standards in the South Coast Nonattainment Area

On July 14, 2011 (76 FR 41562), EPA proposed to approve in part and disapprove in part California's state implementation plan (SIP) for attaining the 1997 fine particulate (PM_{2.5}) national ambient air quality standards (NAAQS) in the Los Angeles-South Coast Air Basin Area (South Coast).¹ California developed this SIP to provide for expeditious attainment of the PM_{2.5} standards in the South Coast and to meet other applicable PM_{2.5} planning requirements in Clean Air Act (CAA) section 172(c) and EPA's PM_{2.5} implementation rule.²

In all, California has made six submittals to address these PM_{2.5} SIP planning requirements for the South Coast. The two principal ones are the South Coast Air Quality Management District (SCAQMD or District) Final 2007 South Coast Air Quality Management Plan (AQMP) (amended 2011) and the California Air Resources Board (CARB) Final 2007 State and Federal Strategy (2007 State Strategy) (amended 2009 and 2011).³ Together, the

¹ The area referred to as "Los Angeles-South Coast Air Basin" (South Coast Air Basin or "South Coast") includes Orange County, the southwestern two-thirds of Los Angeles County, southwestern San Bernardino County, and western Riverside County. For a precise description of the boundaries of the Los Angeles-South Coast Air Basin, see 40 CFR 81.305.

² "The Clean Air Fine Particle Implementation Rule for the 1997 PM_{2.5} NAAQS," 72 FR 20586 (April 25, 2007) and codified at 40 CFR part 51, subpart Z (PM_{2.5} implementation rule).

³ These SIP submittals are:

1. SCAQMD, Final 2007 Air Quality Management Plan (AQMP), adopted on June 1, 2007 by the SCAQMD and September 27, 2007 by CARB, submitted on November 28, 2007.

2. CARB, *Proposed State Strategy for California's 2007 State Implementation Plan*, as amended and adopted on September 27, 2007 by CARB, submitted on November 16, 2007.

South Coast 2007 AQMP and the 2007 State Strategy present a comprehensive and innovative strategy for attaining the 1997 PM_{2.5} standards in the South Coast.

In our July 2011 notice, we proposed multiple approval actions on the South Coast 2007 AQMP. First, we proposed to approve the SIP's base year emissions inventory, the reasonably available control measure (RACM)/reasonably available control technology (RACT) demonstration, the reasonable further progress (RFP) and attainment demonstrations and associated air quality modeling, and related motor vehicle emissions budgets (budgets).⁴ Second, we proposed to approve enforceable commitments by both

3. CARB, *Status Report on the State Strategy for California's 2007 State Implementation Plan (SIP) and Proposed Revisions to the SIP Reflecting Implementation of the 2007 State Strategy* (pages 11-27 only), adopted on April 24, 2009 by CARB, submitted on August 12, 2009.

4. CARB, *Progress Report on Implementation of PM_{2.5} State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions* (Appendices B, C and D only), adopted on April 28, 2011 by CARB, submitted on May 18, 2011. "2011 Progress Report."

5. SCAQMD, *Revisions to the 2007 PM_{2.5} and Ozone State Implementation Plans for the South Coast Air Basin and Coachella Valley (SIP Revisions)*, adopted on March 4, 2011 by the SCAQMD Governing Board and approved by the CARB Board on April 28, 2011 and submitted on May 19, 2011.

6. CARB, *8-Hour Ozone State Implementation Plan Revisions and Technical Revisions to the PM_{2.5} State Implementation Plan Transportation Conformity Budgets for the South Coast and San Joaquin Valley Air Basins*, (South Coast PM_{2.5} SIP MVEBs only) adopted on July 21, 2011 by CARB and submitted on July 29, 2011. (2011 Ozone SIP Revision). Only the PM_{2.5} motor vehicle emissions budgets in this submittal are addressed in today's action.

⁴ The 2011 Progress Report contained budgets that were not approvable because they included emissions reductions from a rule that was ineligible for SIP credit. These budgets also included data entry errors. See 76 FR 41338, 41360. In lieu of these budgets, we proposed to approve alternative budgets that CARB had developed and posted for public comment as part of its 2011 Ozone SIP Revision and stated that the approval was contingent on our receipt of the SIP revision containing the revised budgets. *Id.* CARB submitted that SIP revision on July 29, 2011.

the District and CARB to certain measures and specific amounts of emissions reductions. Third, we also proposed to concur with the State's determination that NO_x, sulfur oxides (SO_x), and volatile organic compounds (VOC) are, and ammonia is not, attainment plan precursors for attainment of the 1997 PM_{2.5} NAAQS in the South Coast nonattainment area. Fourth, we proposed to grant California's request to extend the attainment date for the South Coast PM_{2.5} nonattainment area to April 5, 2015. See 76 FR 41562.

We also proposed to disapprove the contingency measure provisions of the South Coast 2007 AQMP as failing to meet the requirements of the CAA as interpreted in EPA guidance. In addition, we noted that we were rejecting the assignment of 10 tpd of NO_x emissions to the federal government.

A more detailed discussion of each of California's SIP submittals for the South Coast area, the CAA and EPA requirements applicable to them, and our evaluation and proposed actions, can be found in the July 14, 2011 Federal Register notice and the technical support document (TSD) for this final action.⁵

⁵ "Final Technical Support Document and Response to Comments, Final Rulemaking Action on the South Coast 2007 AQMP for PM_{2.5} and the South Coast Portions of the Revised 2007 State Strategy," Air Division, U.S. EPA Region 9, September 30, 2011. The TSD can be found in the docket for this rulemaking.

Our July 2011 proposal was the second time that EPA proposed action on California's South Coast 2007 AQMP to address attainment of the 1997 PM_{2.5} NAAQS. On November 22, 2010, (75 FR 71294) rule, EPA proposed to disapprove the majority of the provisions in this SIP. During the comment period for the November 2010 proposal, we received several comment letters from the public as well as comment letters from CARB and the District. Subsequent to the close of that comment period, CARB adopted and submitted revisions to the South Coast 2007 AQMP and 2007 State Strategy. After considering information contained in the comment letters and the supplemental SIP submittals, we issued the July 2011 proposed rule which substantially amended our November 2010 proposal. As part of our final action, EPA has considered and provided responses to all significant comments submitted in response to both the November 2010 and the July 2011 proposals.

EPA is today approving most elements of the South Coast 2007 AQMP based on our conclusion that they comply with applicable CAA requirements and provide for expeditious attainment of the 1997 PM_{2.5} standards in the South Coast nonattainment area. We are also today disapproving the SIP's contingency measure provisions because they do not provide sufficient emissions reductions. We are continuing to work with

the State and District to identify additional control measures and programs that meet the CAA's requirements for contingency measures consistent with EPA regulations and policy.

II. Summary of Public Comments Received on the Proposals and EPA Responses

As part of our final action, EPA has considered and provided responses to all significant comments submitted in response to both the November 2010 and the July 2011 proposals.

We received eleven comment letters in response to our November 22, 2010 proposal and July 14, 2011 supplemental proposal. In the following sections, we summarize our responses to the most significant comments that we received on the proposals. Our full responses to all the comments received can be found in the "Response to Comments" section of the TSD accompanying today's rulemaking.

We received comments on both proposals from the Natural Resources Defense Council (NRDC) representing various organizations.

We received letters on both proposals from Communities for a Better Environment (CBE) representing various organizations.

We received comment letters on both proposals from the South Coast Air Quality Management District.

We received comments from CARB on our November proposal.⁶

We received comments from Kirk Marckwald, California Environmental Associates, on behalf of the Association of American Railroads, on our November proposal.

Michael W. Lewis, Construction Industry Air Quality Coalition (CIAQC), on behalf of a number of its members, submitted comments on our July amended proposal.

Lawrence J. Joseph, on behalf of the American Road and Transportation Builders Association (ARTBA), submitted comments on our July amended proposal.

Robin Hall, private citizen, submitted comments on our November proposal.

A. *Comments on Proposed Approval of the Emissions Inventory*

Comment: NRDC comments that EPA proposes to approve the inventories in the South Coast 2007 AQMP because they were current and accurate "at the time the Plan was developed and submitted," citing 76 Fed. Reg. 41567. NRDC argues that such language is not in the CAA and the addition is not a reasonable extension of Congress's intent. NRDC argues that Congress did not mean for EPA to rely on inventory data that EPA knew to be incorrect on the basis that the data was thought to be accurate

⁶ The majority of CARB's and the District's comments addressed the November 2010 proposed disapprovals and EPA's grounds for them. These comments were, for the most part, addressed by our July 2011 amended proposal.

at the time it was submitted because Congress' goal is to ensure the adoption and approval of SIPs that will achieve clean air. NRDC notes that section 172(c)(3) expressly envisions that EPA may require revisions to the inventory "to assure that the requirements of this part are met." EPA's interpretation would suggest that the only time such revisions are needed is when it is found that the inventory is not current or accurate as of the date it is submitted and this would undermine any assurance that "the requirements of [Part D] are met."

Response: EPA does not dispute the importance of emissions inventories. We evaluated the emissions inventories in the 2007 AQMP to determine whether they satisfy the requirements of CAA section 172(c)(3) and adequately support the Plan's RACM, RFP and attainment demonstrations. Based on this evaluation, we have concluded that the South Coast 2007 AQMP's base year emissions inventory was based on the most current and accurate information available to the State and District at the time that it was developed and submitted and comprehensively addresses all source categories in the South Coast area, consistent with applicable CAA requirements and EPA guidance. See 76 FR 41562 at 41566-41567 and July 2011 TSD⁷ at section II.A.; see also "General

⁷ "Technical Support Document for the Revised Proposed Rulemaking Action on the South Coast 2007 AQMP for PM_{2.5} and the South Coast Portions of the 2007 State Strategy," Air Division, U.S. EPA, Region 9, June 29, 2011, "July 2011 TSD."

Preamble for Implementation of Title I of the Clean Air Act Amendments of 1990," 57 FR 13498 at 13502 (April 16, 1992) ("General Preamble").

We do not agree with NRDC's suggestion that this inventory undermines the attainment demonstration in the Plan. To the contrary, as discussed in the proposed rule (76 FR 41562, 41567) and in section II.B. below, we have concluded that the State's changes to its methodologies for estimating future emissions do not significantly affect the 2002 base year inventories and, consequently, do not undermine the modeling or other analyses that rely on those inventories. Although significant changes to a base year inventory that undermine the assumptions in an attainment demonstration may call for a more comprehensive reevaluation of the modeling and other planning analyses supporting that demonstration, we conclude based on our technical assessment that such a comprehensive reevaluation is not necessary in this case. We note that states are required to report comprehensive emissions inventories to EPA every three years under the Air Emissions Reporting Requirements in 40 CFR part 51, subpart A. See 40 CFR section 51.30(b).

CAA section 172(b) provides that "the State containing [a nonattainment] area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of [section 172(c) and section 110]" on the schedule established

by EPA, and section 172(c) contains, inter alia, the requirement that nonattainment plans "shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area." We believe it is reasonable to read these provisions together as requiring that the State submit an inventory that is "comprehensive, accurate, [and] current" at the time the State submitted it to EPA, rather than requiring that the State continually revise its plan as new emissions data becomes available. See Brief of Respondents, EPA, in Sierra Club, et al. v. U.S. EPA, et al., Case Nos. 10-71457 and 10-71458 (consolidated), May 5, 2011. States could never effectively plan for air quality improvement if they had to constantly revise their inventories as new data became available. Air quality planning is an iterative process and states and EPA must rely on the best available data at the time the plans are created.

As we stated in our proposal, since late 2007, California has experienced an economic recession that has greatly reduced current levels of economic activity in the State's construction and goods movement sectors. The recession has resulted in lowered projected future levels of activity in this sector. 2011 Progress Report, Appendix E. As a result, projected emission levels from these categories are now substantially lower than the levels projected for 2008 and later in the Plan as submitted

in 2007. At this time, California is addressing these recession impacts on future economic activity through adjustments to the baseline inventories for specific source categories. See 2011 Progress Report, Appendix E, page 2. There are no recession-related adjustments to the 2002 base year inventory in the South Coast 2007 AQMP. CARB also made technical changes to the inventories for diesel trucks, buses, and certain categories of off-road mobile source engines as part of its December 2010 rulemaking amending the In-Use On-Road Truck and Bus Rule and the In-Use Off-Road Engine rule.⁸ *Id.* The State estimates that these changes collectively reduce the 2002 base year total inventory in the South Coast by 4 percent for NOX and 5 percent for PM_{2.5}. See 76 FR 41562, at 41567.

Comment: NRDC questions EPA's calculations that estimated the emissions changes to the 2002 base year inventory (see 76 FR 41562, at 41567), noting that EPA's calculations come from a May 18, 2011 letter from CARB providing supplemental information. NRDC then asserts that these numbers do not match with statements in staff reports on the diesel rules; however, NRDC does not provide the statements or data from the staff reports.

⁸ CARB revised population, regional allocation factors, lifetime odometer assumptions, growth rates, and forecasted vehicle age distributions for heavy duty truck and buses, and updated equipment population, activity, load factors, and future equipment sales for construction equipment, based on updated information. See <http://www.arb.ca.gov/regact/2010/truckbus10/truckbus10.htm> and <http://www.arb.ca.gov/regact/2010/offroadlsi10/offroadlsi10.htm>.

Response: As NRDC noted, EPA calculated the change in the 2002 base year emission inventory based on information provided in the 2011 Progress Report Supplement, transmitted by CARB on May 18, 2011. We took the difference between the "SIP" estimate and the "Current Estimate" columns in Attachment 1, Table SC-2002, to the May 18 letter and divided by the "SIP" estimate to calculate the percent change in the inventories. We explain these calculations in our TSD in Section II.A.

B. Comments on Credit for Baseline Measures

Comment: NRDC asserts that EPA's proposed rule and TSD fail to clearly and accurately account for the measures that contribute to specific emission reductions, such as the Federal, state, and district rules adopted before October 2006 ("baseline measures") that are incorporated into the baseline inventory. NRDC argues that California and SCAQMD must have the data related to these emission reduction estimates, which are critical to the integrity of the Plan, and that an EPA approval of the emissions inventories in the absence of this data would be arbitrary and capricious. NRDC also argues that this "gap in data" is made more problematic by the fact that EPA does not require California's mobile source control measures that have received a waiver of preemption under CAA section 209 ("waiver measures") to be approved into the SIP.

Response: As to the commenter's assertion about the "gap in data" regarding baseline measures and projected baseline inventories, we disagree that there is any inadequacy in the emissions projections that undermines the RACM, RFP or attainment demonstrations in the South Coast 2007 AQMP and 2007 State Strategy. We explained in our amended proposal (76 FR 41562 at 41566-41567) our reasons for concluding both that the 2002 base year inventory in the South Coast 2007 AQMP is comprehensive, accurate, and current as required by CAA section 172(c)(3) and that the projected baseline inventories for 2009, 2012 and 2014 provide adequate bases for the RACM, RFP and attainment demonstrations in the Plan.

With respect to mobile source emissions, we believe that credit for emissions reductions from implementation of California mobile source rules that are subject to CAA section 209 waivers ("waiver measures") is appropriate notwithstanding the fact that such rules are not approved as part of the California SIP. In the TSD supporting our July 14, 2011 proposal (76 FR 41562), we explained why we believe such credit is appropriate. See TSD at section II.F.4.a.i (pp. 97-100). Historically, EPA has granted credit for the waiver measures because of special Congressional recognition, in establishing the waiver process in the first place, of the pioneering California motor vehicle control program and because amendments

to the CAA (in 1977) expanded the flexibility granted to California in order "to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare" (H.R. Rep. No. 294, 95th Congr., 1st Sess. 301-2 (1977)). In allowing California to take credit for the waiver measures notwithstanding the fact that the underlying rules are not part of the California SIP, EPA treated the waiver measures similarly to the Federal motor vehicle control requirements, which EPA has always allowed States to credit in their SIPs without submitting the program as a SIP revision.

EPA's historical practice has been to give SIP credit for motor-vehicle-related waiver measures by allowing California to include motor vehicle emissions estimates made by using California's EMFAC (and its predecessors) motor vehicle emissions factor model in SIP inventories. EPA verifies the emissions reductions from motor-vehicle-related waiver measures through review and approval of EMFAC, which is updated from time to time by California to reflect updated methods and data, as well as newly-established emissions standards. (Emissions reductions from EPA's motor vehicle standards are reflected in an analogous model known as MOVES.) The South Coast 2007 AQMP was developed using a version of the EMFAC model referred to as EMFAC2007, which EPA has approved for use in SIP development in

California. See 73 FR 3464 (January 18, 2008). Thus, the emissions reductions that are from the California on-road "waiver measures" and that are estimated through use of EMFAC are as verifiable as are the emissions reductions relied upon by states other than California in developing their SIPs based on estimates of motor vehicle emissions made through the use of the MOVES model and prior to the release of MOVES made through the use of the MOBILE model. All other states use the MOVES model in their baseline inventories without submitting the federal motor vehicle regulations for incorporation into their SIPs.

Similarly, emissions reductions that are from California's waiver measures for non-road engines and vehicles (e.g., agricultural, construction, lawn and garden and off-road recreation equipment) are estimated through use of CARB's OFFROAD emissions factor model.⁹ (Emissions reductions from EPA's non-road engine and vehicle standards are reflected in an analogous model known as NONROAD). Since 1990, EPA has treated California non-road standards for which EPA has issued waivers in the same manner as California motor vehicle standards, *i.e.*, allowing credit for standards subject to the waiver process without requiring submittal of the standards as part of the SIP. In so doing, EPA has treated the California non-road standards

⁹Information about CARB's emissions inventories for on-road and non-road mobile sources, and the EMFAC and OFFROAD models used to project changes in future inventories, is available at <http://www.arb.ca.gov/msei/msei.htm>.

similarly to the Federal non-road standards, which are relied upon, but not included in, various SIPs.

CARB's EMFAC and OFFROAD models employ complex routines that predict vehicle fleet turnover by vehicle model years and include control algorithms that account for all adopted regulatory actions which, when combined with the fleet turnover algorithms, provide future baseline projections. See 2007 State Strategy, Appendix F at 7-8. For stationary sources, the California Emission Forecasting System (CEFS) projects future emissions from stationary and area sources (in addition to aircraft and ships) using a forecasting algorithm that applies growth factors and control profiles to the base year inventory.¹⁰ See *id.* at 7. The CEFS model integrates the projected inventories for both stationary and mobile sources into a single database to provide a comprehensive statewide forecast inventory, from which nonattainment area inventories are extracted for use in establishing future baseline planning inventories. See *Id.* The South Coast 2007 AQMP describes how the District developed the future baseline inventories in the plan, based in part on the emissions data and baseline

¹⁰ Information on base year emissions from stationary point sources is obtained primarily from the districts, while CARB and the districts share responsibility for developing and updating information on emissions from various area source categories. See 2007 State Strategy, Appendix F at 21; see also South Coast 2007 AQMP, Appendix III at pp. 1-9 through 1-15 (describing the SCAQMD's and CARB's methodologies for developing 2002 base year emissions estimates for stationary point and area sources).

projections provided by CARB and other California agencies. See generally South Coast 2007 AQMP, Appendix III. The District's projections took into account the controls implemented under SCAQMD rules adopted as of June 2006, most CARB regulations adopted by June 2005, and a specific set of growth rates from the Southern California Association of Governments (SCAG) for population, industry, and motor vehicle activity, among other factors. See *id.* at 2-3. In 2011, CARB updated the baseline emissions projections for several source categories to account for, among other things, more recent economic forecasts and improved methodologies for estimating emissions from the heavy-duty truck and construction source categories. See 2011 Progress Report at Appendix E. These methodologies for projecting future emissions based on growth factors and existing Federal, State, and local controls were consistent with EPA guidance on developing projected baseline inventories. See TSD at section II.A; see also "Procedures for Preparing Emissions Projections," EPA Office of Air Quality Planning and Standards, EPA-450/4-91-019, July 1991; "Emission Projections," STAPPA/ALAPCO/EPA Emission Inventory Improvement Project, Volume X, December 1999 (available at <http://www.epa.gov/ttnchie1/eiip/techreport/volume10/x01.pdf>).

In sum, the 2002 base year and future projected baseline inventories in the South Coast 2007 AQMP were prepared using a sophisticated set of CARB and SCAQMD methodologies to estimate and project emissions from stationary sources, in addition to the most recent emissions factors and models and updated activity levels for emissions associated with mobile sources, including: (1) the latest EPA-approved California motor vehicle emissions factor model (EMFAC2007) and the most recent motor vehicle activity data from SCAG; (2) improved methodologies for estimating emissions from specific source categories; and (3) CARB's non-road mobile source model (the OFFROAD model). See TSD at Section II.A (referencing, *inter alia*, South Coast 2007 AQMP at Appendix III and 2007 State Strategy at Appendix F) and 2011 Progress Report. EPA has approved numerous California SIPs that rely on base year and projected baseline inventories including emissions estimates derived from the EMFAC, OFFROAD, and CEFS models. See, e.g., 65 FR 6091 (February 8, 2000) (proposed rule to approve 1-hour ozone plan for South Coast) and 65 FR 18903 (April 10, 2000) (final rule); 70 FR 43663 (July 28, 2005) (proposed rule to approve PM-10 plan for South Coast and Coachella Valley) and 70 FR 69081 (November 14, 2005) (final rule); 74 FR 66916 (December 17, 2009) (direct final rule to approve ozone plan for Monterey Bay). The commenter has provided no information to support a claim that these

methodologies for developing base year inventories and projecting future emissions in the South Coast are inadequate to support the RACM, RFP, and attainment demonstrations in the South Coast 2007 AQMP.

For all of these reasons and as discussed in our amended proposal (76 FR 41562 at 41566-41567), we have concluded that the 2002 base year inventory in the South Coast 2007 AQMP is a "comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants" in the South Coast area, consistent with the requirements for emissions inventories in CAA section 172(c)(3), 40 CFR section 51.1008, and 40 CFR part 51, subpart A. In addition, we conclude that the projected baseline inventories for 2009, 2012 and 2014 were prepared consistent with EPA's guidance on development of emissions inventories and attainment demonstrations and, therefore, provide an adequate basis for the RACM, RFP and attainment demonstrations in the Plan. See TSD at section II.A.

C. Comments on PM_{2.5} Plan Precursors

Comment: NRDC commented that our proposed rule does not adequately explain why ammonia (NH₃) is not a precursor for PM_{2.5} formation.

Response: Under the PM_{2.5} implementation rule, ammonia is not a PM_{2.5} plan precursor unless either EPA or the State provides an appropriate technical demonstration showing that ammonia emissions from sources in the State significantly contribute to PM_{2.5} concentrations in the nonattainment area. See 40 CFR section 51.1002(c)(4). Absent such a technical demonstration, the State is not required to address ammonia in its PM_{2.5} attainment plan or to evaluate sources of ammonia emissions in the State for control measures.

Comment: Communities for a Better Environment (CBE) asserts that methane is a reactive VOC, a smog precursor, and a potent greenhouse gas (GHG), and that EPA should require the SCAQMD to revise its definition of VOC in Rule 102 to remove the exemption for methane. In support of these assertions, CBE states that:

(1) a 2002 Harvard University modeling study¹¹ concludes that methane reductions could be highly effective in reducing ambient ozone levels; (2) SCAQMD's draft 2007 AQMP identified significantly larger amounts of Total Organic Gases (TOG) including methane from refineries than VOC emissions (10.1 tons per day (tpd) of TOG versus 6 tpd of VOC); (3) the District should require control of all organic gases from oil refineries; and (4) the District should also review its list of other TOG

¹¹ Fiore, et al, Harvard University, *Linking ozone pollution and climate change: The case for controlling methane*, 2002.
http://www.gfdl.noaa.gov/bibliography/related_files/amf0201.pdf.

compounds that are exempt from regulation. CBE contends that regulation of methane is a reasonably available control measure that should be required because additional VOC reductions are needed to satisfy RACT/RACM requirements.

Response: The SCAQMD's definition of VOC in Rule 102 is consistent with EPA's definition of VOC in 40 CFR section 51.100(s), which excludes methane because it has been determined to have negligible photochemical reactivity. 40 CFR section 51.100(s)(1); *see also* 62 FR 44900 (August 25, 1997) (final rule revising definition of VOC to exclude methane and other compounds). EPA approved Rule 102 into the SCAQMD portion of the California SIP on January 8, 2007. *See* 72 FR 656. Accordingly, pursuant to its SIP-approved definition of VOC, SCAQMD is not required to regulate methane as a VOC for purposes of preparing SIPs to attain the NAAQS. To the extent that CBE intended to challenge the exclusion of methane from EPA's regulatory definition of VOC at 40 CFR section 51.100(s), such a challenge is outside the scope of today's action on the PM_{2.5} attainment plan for the South Coast area. Likewise, CBE's assertions about the effect of methane controls on ambient ozone levels are also outside the scope of today's action, which addresses the State's plan for attaining the 1997 PM_{2.5} standards.

D. *Comments on Reasonably Available Control Measures (RACM)*

Demonstration

Comment: CBE states that EPA should require the SCAQMD to complete a new RACM/RACT demonstration including assessment of all available control measures for direct emissions of PM_{2.5} as well as measures for control of secondary PM_{2.5} resulting from NO_x, SO_x, and VOC emissions. CBE also provides a list of potential pollution control and energy efficiency measures that it asserts should be included "as part of a new, broader, and complete RACM/RACT assessment to demonstrate attainment expeditiously." Finally, CBE asserts that because the South Coast 2007 AQMP is several years old, it is important to reassess and update the control measures in the plan, especially given the SCAQMD's failure to demonstrate attainment. CBE is also opposed to what it characterizes as EPA proposed approval of a commitment by CARB to propose measures later, as a lump sum.

Response: Section 172(c)(1) of the CAA requires that each attainment plan "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national

primary ambient air quality standards." For over 30 years, EPA has consistently interpreted this provision to require that States adopt only those "reasonably available" measures necessary for expeditious attainment and to meet RFP requirements. 40 CFR section 51.1010; *see also* 44 FR 20372 (April 4, 1979) (Part D of title I of the CAA "does not require that all sources apply RACM if less than all RACM will suffice for [RFP] and attainment"); 57 FR 13498 at 13560 (April 16, 1992) ("where measures that might in fact be available for implementation in the nonattainment area could not be implemented on a schedule that would advance the date for attainment in the area, EPA would not consider it reasonable to require implementation of such measures"); "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas," November 30, 1999 (1999 Seitz Memo) (a State may justify rejection of a measure as not "reasonably available" for that area based on technological or economic grounds); and 70 FR 71612 (November 29, 2005) at 71661 (noting that States "need adopt measures only if they are both economically and technologically feasible and will advance the attainment date or are necessary for RFP"). EPA's interpretation of section 172(c)(1) has been upheld by several courts. *See, e.g., Sierra*

Club v. EPA, et al., 294 F. 3d 155 (D.C. Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735 (5th Cir. 2002).

Under the PM_{2.5} Implementation Rule at 40 CFR section 51.1010, a RACM demonstration must include "the list of the potential measures considered by the State, and information and analysis sufficient to support the State's judgment that it has adopted all RACM, including RACT." 40 CFR section 51.1010(a). In addition, "[p]otential measures that are reasonably available considering technical and economic feasibility must be adopted as RACM if, considered collectively, they would advance the attainment date by one year or more." As explained in the preamble to the PM_{2.5} Implementation Rule, Congress provided EPA and States broad discretion to determine what measures to include in an attainment plan, and the language in section 172(c)(1) requiring only "reasonably available" measures and implementation of these measures "as expeditiously as practicable" indicates that Congress intended for the RACT/RACM requirement to be driven by an overall requirement that the measure be "reasonable." 72 FR 20586 at 20610 (April 25, 2007). Thus, the rule of "reason" drives the decisions on what controls to apply, what should be controlled, by when emissions must be reduced, and finally, the rigor required in a State's RACT/RACM analysis. See *id.* States may, as part of a RACM analysis, consider the costs of potential control measures and whether the

measures can be readily and effectively implemented without undue administrative burden. *See id.* (citing 55 FR 38327 and 66 FR 26969).

As discussed in our July 14, 2011 amended proposal, we have evaluated the collection of reasonably available control measures that CARB, the District, and the Southern California Association of Governments (SCAG) have adopted and submitted with the attainment demonstration in the South Coast 2007 AQMP and 2007 State Strategy to meet the RACM/RACT requirement in CAA section 172(c)(1) and 40 CFR section 51.1010. *See* 76 FR 41562 at 41568-41572 and TSD at section II.D. For the reasons discussed in our amended proposal and as further discussed below, we conclude that the South Coast 2007 AQMP and the 2007 State Strategy demonstrate that the State has adopted all reasonably available control measures (including RACT for stationary sources) necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements, as required by CAA section 172(c)(1) and 40 CFR section 51.1010. Thus, we disagree with CBE's assertion that the additional measures it has identified are required RACM under CAA section 172(c)(1) for purposes of the 1997 PM_{2.5} NAAQS in the South Coast and or that it is necessary to reassess or update the control measures in the plan at this time. We explain more specifically below our reasons for concluding that the additional control

options and energy efficiency measures identified by CBE are not required RACM for purposes of attaining the 1997 PM_{2.5} NAAQS in the South Coast.

Comment: CBE objects to what it characterizes as CARB's "promise to 'propose' measures later, in a lump sum," and argues that this provides the public with no assurance that attainment will be achieved. CBE asserts that individual emission reduction targets should be attached to each separate measure and they should be individually required. Finally, CBE argues that "[a]lternative control measures and emissions trading should not be allowed, because of deficiencies in the reliability of such programs."

Response: We disagree with CBE's contention that it is necessary for the State to commit to individual measures with specific emission reduction targets for each measure. For the reasons discussed in our proposed rule (see 76 FR 41562 at 41575-41577) and further below (see responses to comments on "enforceable commitments"), we conclude that CARB and the SCAQMD have satisfied the criteria that EPA has historically applied in approving attainment demonstrations based in part on enforceable commitments in lieu of adopted measures. The 2007 State Strategy includes commitments to propose defined new measures and an enforceable commitment for emissions reductions sufficient, in combination with existing measures and the

District's commitments, to attain the PM_{2.5} NAAQS in the South Coast by April 5, 2015. See 76 FR 41562, at 41571 and CARB Resolution 07-28 (September 27, 2007, Attachment B, p. 3). As discussed below in our responses to comments on "enforceable commitments," the 2011 SIP revisions changed the total amount of reductions needed from control strategy measures in 2014 to 44 tpd of VOC reductions, 129 tpd of NO_x reductions, and 41 tpd of SO_x reductions (the PM_{2.5} remaining commitment stayed the same at 9 tpd of directly-emitted PM_{2.5}). See July 2011 TSD, Table F-10. Although CARB's commitment provides that it may adopt "alternative" measures (i.e., measures different from the potential control options identified in the South Coast 2007 AQMP or 2007 State Strategy), ultimately the State is obligated to achieve these specific aggregate amounts of emission reductions through the adoption of enforceable measures no later than the beginning of 2014. See 40 CFR section 51.1007(b) (requiring implementation of all control measures needed for expeditious attainment no later than the beginning of the year prior to the attainment date). The State's commitments to achieve specific amounts of emission reductions by 2014 are enforceable by EPA and citizens under CAA sections 113 and 304, respectively. We note that CARB has already adopted and submitted to EPA either for SIP-approval or for a CAA section 209 waiver most of the measures it had committed to adopt in the

2007 State Strategy, as revised. See 2011 Progress Report, Appendix B, Table B-1.

It is unclear what CBE intends by stating that "alternative control measures and emissions trading should not be allowed" because of deficiencies in their reliability.

Comment: CBE asserts that the South Coast 2007 AQMP must set Best Available Retrofit Control Technology (BARCT) standards for NO_x and other PM_{2.5} precursor emissions from industrial boilers and heaters, and that it should require replacement of old and severely inefficient equipment at oil refineries and other large sources. CBE also asserts that the SCAQMD's Regional Clean Air Incentives Market (RECLAIM) program does not produce the emission reductions that are achievable from industrial boilers and heaters because it allows sources to buy and sell credits. CBE contends that a RACM demonstration should include evaluation of each industrial boiler and heater, including its age, the type of fuel it uses, and its emissions of criteria pollutants, toxics and GHGs. Additionally, CBE claims that CARB, as part of its recent Greenhouse Gas (GHG) regulatory process under California's Assembly Bill 32 (AB32), identified numerous methods for increasing energy efficiency, reducing fuel use, and thus reducing emissions of criteria pollutants and precursors as well as GHGs statewide, and that EPA should require the SCAQMD to carry out the same evaluation for industrial boilers and

heaters in the South Coast. CBE contends that such energy efficiency measures could also save money. Finally, CBE asserts that Ultra-Low NOx burners are cost-effective and must be evaluated as part of a RACM analysis for industrial boilers and heaters.

Response: The SCAQMD had adopted two regulations to control NOx emissions from industrial boilers, steam generators and process heaters in the South Coast: Rule 1146.1 (for boilers with rated heat inputs between 2 and 5 MMBtu/hour) and Rule 1146 (for boilers with rated heat inputs above 5 MMBtu/hour, with certain exemptions). EPA has approved both of these rules into the SIP. See 67 FR 16640 (April 8, 2002) and 60 FR 46220 (September 6, 1995). EPA recently proposed a limited approval and limited disapproval of revisions to these rules that further tighten the NOx emission limits in both rules. See 76 FR 40303 (July 8, 2011).¹² As part of that action, we evaluated the stringency of the rules' control requirements and proposed to conclude that the rules together require all control measures that are

¹² Our proposed limited disapproval was based on specific deficiencies in the compliance provisions in both rules. These enforceability deficiencies do not alter our proposal to conclude that the NOx emission limits in the rule, which are more stringent than the SIP-approved version of the rule, represent RACT-level controls. See TSDs at page 3. Note, however, that these measures are not eligible for SIP credit until EPA approves rule revisions correcting the enforceability deficiencies identified in our proposal. We expect the State to submit, as expeditiously as practicable, rule revisions to address these deficiencies consistent with its enforceable emission reduction commitments. See 76 FR 41562 at 41569, Table 3.

reasonably available for covered boilers, steam generators and process heaters. See *id.* and associated technical support documents (TSDs). We also noted that the NO_x emission limits in both rules are equivalent to California BARCT standards for these types of boilers, steam generators and process heaters. See *id.* According to the SCAQMD's staff report on Rule 1146, most boilers subject to the rule will have to use either ultra-low NO_x burners or selective catalytic reduction (SCR) controls to meet the rule's emission limits, depending on the size of the boiler. See Final Staff Report, Proposed Amended Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, at ES-1. Boilers with rated heat inputs above 40 MMBtu/hour located at refineries are subject to the NO_x and SO_x emission caps in SCAQMD's RECLAIM program, discussed immediately below. See e-mail dated September 22, 2011, from Ken Mangelsdorf (SCAQMD) to Idalia Perez (EPA Region 9), re: "question about refineries and RECLAIM." These adopted measures require all RACM for covered industrial boilers, steam generators and process heaters in the South Coast and provide an adequate basis for approving the RACM demonstration in the South Coast 2007 AQMP with respect to such emission units. We therefore disagree with CBE's assertion that the SCAQMD is required to evaluate

additional control measures for industrial boilers and heaters as part of its RACM demonstration for the 1997 PM_{2.5} standards.

We also disagree with CBE's objections to the inclusion of RECLAIM as a RACM measure. RECLAIM is a market incentive program designed to provide sources flexibility in complying with emissions limitations. Cap and trade programs, like RECLAIM, can take into account emissions control technology by limiting the size of the emissions cap. EPA policy provides that a cap and trade program may satisfy RACT by ensuring that the level of emission reductions resulting from implementation of the program will be equal, in the aggregate, to those reductions expected from the direct application of RACT on affected sources within the nonattainment area. See 59 FR 16690 (April 7, 1994) and "Improving Air Quality with Economic Incentive Programs," EPA-452/R-01-001 (January 2001), at Section 16.7. EPA approved the RECLAIM program into the California SIP in June 1998 based in part on a conclusion that the NOx emission caps in the program satisfied the RACT requirements of CAA section 182(b)(2) and (f) for covered NOx emission sources¹³ in the aggregate. See 61 FR 57834 (November 8, 1996) and 63 FR 32621 (June 15, 1998). In 2005 and 2010, the SCAQMD tightened the NOx and SOx emissions caps in Rule 2002 to address California Health

¹³ RECLAIM generally applies to facilities that emit 4 tons or more per year of NOx or SOx in the year 1990 or subsequent years. See Rule 2001.

and Safety Code requirements for BARCT,¹⁴ to require that agricultural sources be subject to existing command-and-control regulations instead of RECLAIM, and to satisfy a NOx reduction commitment in the 2003 AQMP. See Technical Support Document for EPA's Rulemaking for the California SIP regarding SCAQMD RECLAIM program rules, March 27, 2006, at pp. 5, 6 and Attachment 4. EPA approved the revisions to the NOx and SOx emission caps in Rule 2002 on August 29, 2006 and August 12, 2011 respectively, based in part on conclusions that the revisions continue to satisfy NOx RACT requirements. See 71 FR 51120 (August 29, 2006) and 76 FR 50128 (August 12, 2011). Because RECLAIM achieves reductions of NOx emissions from covered sources that are equivalent, in the aggregate, to the reductions achieved by RACT-level controls, we conclude that it requires all RACM for covered sources. See 76 FR at 41569, Table 3.

Comment: CBE asserts that emissions of criteria pollutants, toxics, and GHGs could be reduced by requiring the SCAQMD to implement the findings of industrial energy use audits performed under California's AB32 program. Specifically, CBE asserts that the SCAQMD could supplement CARB's work under AB32 by: (1) requiring implementation of potential energy efficiency

¹⁴ BARCT is defined as "an emission limitation that is based on the maximum degree of reduction achievable taking into account environmental, energy, and economic impacts by each class or category of source." See California Health and Safety Code, Section 40406.

improvements identified through audits; (2) expanding the audit requirements to cover more industrial sources, including certain large sources and oil refineries exempted from CARB's program; and (3) improving the reporting requirements associated with the audits. CBE states that industrial energy efficiency assessments not only reduce pollution but also reduce energy costs and should be required RACM for purposes of the PM_{2.5} NAAQS and other standards. CBE contends, therefore, that EPA should require the SCAQMD to add such auditing requirements to the South Coast 2007 AQMP in strengthened form with emission reduction targets.

Response: Although we agree generally that improvements in energy efficiency can reduce emissions of criteria and other air pollutants, we disagree with CBE's assertion that the specific measures associated with energy efficiency that it has identified are required RACM for purposes of attaining the 1997 PM_{2.5} standards in the South Coast. Under the PM_{2.5} Implementation Rule at 40 CFR section 51.1010(b), "[p]otential measures that are reasonably available considering technical and economic feasibility must be adopted as RACM if, considered collectively, they would advance the attainment date by one year or more." CBE asserts only generally that the measures it has identified are reasonably available for implementation in the South Coast considering technical and economic feasibility, and provides no

information to support a conclusion that these additional measures would, individually or collectively with other reasonable measures, advance attainment of the 1997 PM_{2.5} standards by at least one year in the South Coast.

We explained in the preamble to the PM_{2.5} Implementation Rule (72 FR 20586) that although States must conduct a thorough analysis of reasonably available measures, States are not required to analyze every conceivable measure to satisfy the RACM requirement in CAA section 172(c)(1). 72 FR at 20612. As long as a State's analysis is "sufficiently robust in considering potential measures to ensure selection of all appropriate RACT and RACM, and the State provides a reasoned justification for its analytical approach, we will consider approving that State's RACT/RACM strategy." *Id.* As discussed in our July 14, 2011 amended proposal, CARB, the SCAQMD, and SCAG have conducted thorough analyses of all reasonable control measures (including RACT¹⁵ for stationary sources) that are available for implementation in the South Coast and provided reasoned justifications for the collection of RACM that the State has adopted or committed to adopt, based on these analyses. See 76 FR 41562 at 41568, 414572 and TSD at section II.D; see also South Coast 2007 AQMP, Appendix VI. CBE's

¹⁵ EPA has defined RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. 44 FR 53762 (September 17, 1979).

comments do not change our conclusion that the State has adopted all RACM and RACT necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements, as required by CAA section 172(c)(1) and 40 CFR section 51.1010.

Comment: CBE asserts that SCAQMD "must implement measures [for additional SOx reduction] that were identified in the recent SOx RECLAIM regulation, but not adopted."

Response: This comment does not contain sufficient specificity for EPA to respond.

Comment: CBE asserts that major flaring and smoking episodes occur regularly at refineries in the region¹⁶ and that the SCAQMD must require that every refinery have a flare minimization plan (FMP) consistent with rigorous control methods achieved by two specific oil refineries in Martinez, California and Flint Hills, Texas. CBE asserts that FMPs are reasonably available measures that could significantly reduce short-term emissions of particulates, SOx, NOx, and VOC, although they probably would not significantly affect annual emissions levels. CBE states that the SCAQMD's flare rule requires implementation of an FMP only if emissions exceed certain levels on an annual basis, and that the South Coast 2007 AQMP does not adequately account for emissions from flaring events, which are episodic. CBE asserts that EPA should require the SCAQMD to: (1) model the ambient PM_{2.5}

¹⁶ CBE references several sources of SCAQMD data as the basis for its estimates of criteria pollutant emissions from these flaring episodes.

impacts of large flaring events; (2) revise the SCAQMD flare regulation to require that every refinery implement an FMP consistent with those at Shell's refineries in Martinez, California and Flint Hills, Texas; and (3) add a provision to the SCAQMD flare regulation to prohibit all flaring (with certain exceptions) unless it is consistent with an approved FMP, as provided in the Bay Area Air Quality Management District (BAAQMD) Regulation 12-12-301 ("Flare Minimization"). CBE contends that such measures are technologically and economically feasible and therefore required RACM.

Response: The SCAQMD regulates refinery flares through Rule 1118 ("Control of Emissions from Refinery Flares"), which EPA approved into the SIP on August 28, 2007. See 72 FR 49196. Although CBE correctly notes that Rule 1118 requires FMPs only at refineries that exceed specific annual emissions thresholds (see Rule 1118 at subsection (d)(3)(a) and (e)(1)), CBE appears to misunderstand several other requirements in the rule that apply to all petroleum refineries and that are essentially equivalent to the FMP requirements in the BAAQMD's Rule 12-12. We agree that FMPs are reasonably available measures and note that requirements in BAAQMD 12-12 401.1 through 401.3 are required of all petroleum refineries under SCAQMD Rule 1118 sections (c)(2) and (c)(3). For example, BAAQMD 12-12 401.4 requires a description of prevention measures addressing

specific activities that may cause flaring. SCAQMD's Rule 1118 contains a requirement in section (c)(2)(C) that requires refinery owners to submit to the SCAQMD "descriptions of any equipment, processes or procedures the owner or operators plans to install or implement to eliminate or reduce flaring," including the scheduled year of installation or implementation. This requirement is essentially equivalent to the requirement in BAAQMD Rule 12-12 401.4. Thus, SCAQMD Rule 1118 contains in sections (c)(2) and (c)(3) requirements that, although separate from the requirements for "flare minimization plans" under section (e) of the rule, essentially require SCAQMD facilities to submit plans to reduce flaring events similar to those required under BAAQMD Rule 12-12. We disagree, therefore, with CBE's assertion that the SCAQMD is required to adopt additional control requirements for refinery flares and conclude that Rule 1118 requires all RACM for these emission sources in the South Coast.¹⁷

We note that SCAQMD's Board Resolution adopting the District's most recent revisions to SCAQMD Rule 1118 directs

¹⁷ We note that CBE's estimates of emissions from flaring episodes during the 2009-2011 time period are consistent with data provided in SCAQMD staff reports submitted to EPA, which show an overall decline in emissions from flaring events since 2004. See, e.g., SCAQMD 2005 Staff Report Table IV-2. Generally, it is difficult to develop reliable estimates of emissions from flaring events given uncertainties about the efficiency of a particular flare event. Flares are devices which burn anything in the stream, and the contents of the stream may not be completely combusted, causing an unknown composition of emissions.

District staff to evaluate the feasibility of a daily emissions target and to evaluate refinements to the annual emissions targets as warranted. See SCAQMD Board Resolution 2005-32 (November 4, 2005). Consistent with this directive, we encourage the District to reevaluate the control and compliance requirements in Rule 1118 as new information about feasible controls becomes available, and to adopt any additional control measures that are reasonably available as expeditiously as practicable consistent with CAA requirements.

Comment: CBE asserts that oil refineries, which contribute to power plant emissions by using substantial amounts of electricity from the grid, should be required to have backup power using clean/alternative energy sources. Specifically, CBE claims that electrical grid shutdowns cause power outages at oil refineries, which in turn cause flaring and significant amounts of air pollution near the refineries. CBE asserts that the SCAQMD should require oil refineries to use alternative energy sources (in place of fossil-fuel electricity generation), such as wind and solar energy, and that such measures should be required RACM. Based on general information about power plant emissions obtained from PG&E, CBE provides its own estimates of the SO_x and NO_x emission reductions that could be achieved if oil refineries were to meet some or all of their electricity demands with clean alternative energy sources. CBE contends

that the "large air emissions caused by fossil fuel generation at Power Plants due to oil refinery electricity demand is worthy of phaseout requirements by the AQMD as a measure in the AQMP."

Response: Although we generally agree that use of alternative (*i.e.*, non-fossil fuel) energy sources to power oil refineries and other large industrial operations would reduce emissions of air pollutants, we disagree with CBE's generalized assertion that such measures are required RACM for purposes of attaining the 1997 PM_{2.5} NAAQS in the South Coast. Section 172(c)(1) of the CAA requires that States adopt measures that are "reasonably available" and that are necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements. 40 CFR section 51.1010. As explained above, States are required to conduct a thorough analysis of reasonably available measures but are not required to analyze every conceivable measure to satisfy the RACM requirement in CAA section 172(c)(1). 72 FR at 20612.

As discussed in our July 14, 2011 amended proposal, CARB, the SCAQMD, and SCAG have conducted thorough analyses of all reasonable control measures that are available for implementation in the South Coast and provided reasoned justifications for the collection of RACM that the State has adopted or committed to adopt, based on these analyses. See 76 FR 41562 at 41568-41572 and TSD at section II.D. Electric

generating stations and oil refineries in the South Coast are subject to numerous prohibitory rules and other control measures that regulate emissions of NO_x, SO_x, VOC, and PM_{2.5}, among other air pollutants, from various emission points within each facility. See, e.g., 76 FR at 41570, Table 3 and TSD, Appendix B (identifying, e.g., Rule 1105 for fluidized-bed coal combustion units (FCCUs) and Rules 1146 and 1146.1 for Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters.) Power plants in the district are also subject to RECLAIM. See South Coast Rules 2011 and 2012. CBE has provided no information to support its general assertion that requiring the oil refining industry to obtain electricity (backup electricity or otherwise) from alternative energy sources instead of from the electrical grid is a "reasonably available" control measure within the meaning of CAA section 172(c)(1). These comments therefore do not change our conclusion that the State has adopted all RACM and RACT necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements, as required by CAA section 172(c)(1) and 40 CFR section 51.1010.

Comment: CBE states that the SCAQMD is in the process of developing a regulation to control coke drum emissions and that EPA should ensure that this rule is included in the District's RACM/RACT control strategy. CBE also asserts that this rule has

been repeatedly delayed due to pressure from the oil industry, and that EPA should ensure that the rulemaking occurs expeditiously. CBE asserts that refinery coking operations are increasing due to the use of increasingly heavier crude at oil refineries.

Response: EPA does not currently have reliable information about the types and amounts of pollutant emissions from refinery coke drums in the South Coast, and CBE has not provided such information to support its assertions. Consequently we cannot conclude at this time that any such controls would represent RACT in the South Coast. We note that EPA Region 9 staff recently contacted SCAQMD staff to inquire about the status of this rule and learned that the District is awaiting information from EPA emission studies to inform the District's assessment of the feasibility and cost-effectiveness of regulating coke drum emissions.¹⁸ EPA has sent requests for information about emissions from coking operations to several facilities in the South Coast.¹⁹ Given the need for additional emission reductions in the South Coast to attain the 1997 PM_{2.5} standards as well as other standards for which the area is designated nonattainment (see 40 CFR section 81.305), we encourage the SCAQMD to adopt

¹⁸ See record of phone conversation between Nicole Law and Stanley Tong, USEPA Region 9 Air Division, and Eugene Teszler, SCAMQD, dated September 14, 2011.

¹⁹ See record of phone conversation between Nicole Law, USEPA Region 9 Air Division, and Brenda Shine, USEPA OAQPS, dated September 20, 2011.

and implement this rule as expeditiously as practicable consistent with CAA requirements.

Comment: CBE states that it had proposed "requiring 33% RPS for all power plants within the SCAQMD" and asserts that this is "clearly achievable" since it has been adopted as State law.

Response: Assuming CBE intended to assert that the SCAQMD should require all investor-owned utilities, electric service providers, and community choice aggregators within the South Coast to procure 33 percent of their power from renewable sources by 2020 as currently required by the State under California's Renewable Portfolio Standard (RPS), and that such a measure is a required RACM under CAA section 172(c)(1) for purposes of attaining the 1997 PM_{2.5} NAAQS in the South Coast, we disagree. As discussed above, section 172(c)(1) of the CAA requires that States adopt measures that are "reasonably available" and that are necessary to demonstrate attainment of the NAAQS as expeditiously as practicable and to meet any RFP requirements. 40 CFR section 51.1010. CBE has provided no information to support either an assertion that California's 33% RPS under Senate Bill 2 is such a measure or an assertion that some additional RPS to be implemented by the SCAQMD within the South Coast would be such a measure.

Comment: CBE claims that the RACM analysis for locomotive emissions in the South Coast 2007 AQMP is deficient because the

SCAQMD failed to evaluate reasonably available technologies that could reduce locomotive and other railyard emissions. In support of this assertion, CBE references two September 2009 public comment letters to CARB and an August 2009 CARB document entitled "Technical Options to Achieve Additional Emissions and Risk Reductions from California Locomotives and Railyards." Citing *Association of American Railroads v. South Coast Air Quality Management District*, 622 F.3d 1094 (9th Cir. 2010), CBE contends that the Ninth Circuit "has indicated that the SCAQMD and the State of California have the authority to reduce emissions from locomotive sources through its determination that [the Interstate Commerce Commission Termination Act of 1995] may not preempt some measures included in a federally approved SIP." CBE asserts that EPA should therefore direct California and the SCAQMD to cure this defect.

Response: We disagree. SCAQMD's RACM Demonstration (see Appendix VI to the 2007 South Coast AQMP) does list one type of measure with the potential to reduce locomotive and other railyard emissions (locomotive anti-idling) as one of the measures the District evaluated as a potential RACM/RACT measure (see Table 2 on page VI-11 of the 2007 South Coast AQMP, Appendix VI). With reference to long duration switch yard locomotive idling measures, SCAQMD concluded that "[I]f there are any additional SIP emission reductions that could be

accounted for using these innovative technology, they would be addressed by CARB during the rule development of their on-road and off-road control measures." 2007 South Coast AQMP, Appendix VI, page VI-12. This is a reasonable conclusion in light of the legal challenge to the District's own locomotive anti-idling rules (SCAQMD Rules 3501, 3502, and 3503). Moreover, CARB has adopted regulations for mobile cargo handling equipment at ports and intermodal rail yards which are designed to use best available control technologies to reduce public exposure to NO_x and PM. CARB's mobile cargo handling equipment rules are the subject of a current authorization request to EPA. See 76 FR 5586 (February 1, 2011).

We note that, while the Ninth Circuit's opinion in the *Association of American Railroads v. South Coast Air Quality Management District* case opens the door to District regulation of locomotive idling under Federal law by signaling the potential for harmonization between such District rules and the Interstate Commerce Commission Termination Act of 1995 (ICCTA) if the rules are approved into the SIP, there remains uncertainty as to whether the District's locomotive anti-idling rules would be within the scope of the District's state-law regulatory authority. The Ninth Circuit did not decide that issue. 622 F.3d at 1096.

In addition, the documents and court case cited by CBE in support of the idea that a number of locomotive- and railyard-related measures may be technologically and economically feasible, as well as legally enforceable, all post-date the development and submittal of the 2007 South Coast AQMP and 2007 State Strategy. As such, they cannot be used to undermine the RACM demonstration for $PM_{2.5}$ submitted by California for the South Coast several years earlier. The cited documents and court case may influence the development of control measures for future air quality plans for the South Coast, as well as other nonattainment areas, but they do not undermine the RACM demonstration in the plan that we are approving in relevant part today.

For the reasons set forth in the preceding paragraphs, these comments do not change our conclusion that the State has adopted all RACM and RACT necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements for the 1997 $PM_{2.5}$ standards, as required by CAA section 172(c)(1) and 40 CFR section 51.1010. See 72 FR at 20612 (noting that although States must conduct thorough analyses of reasonably available measures, States are not required to analyze every conceivable measure to satisfy the RACM requirement in CAA section 172(c)(1)).

Comment: NRDC asserts that the South Coast 2007 AQMP does not satisfy the RACM requirement in CAA 172(c)(1) because it fails to identify and require implementation of certain reasonably available transportation control measures (TCMs) as expeditiously as practicable. NRDC asserts that "EPA's Transportation Conformity Rule requires that TCMs either be listed in section 108(f) of the CAA, or reduce transportation emissions by lowering vehicle use or improving traffic flow." Specifically, NRDC asserts that in the "illustrative list of TCMs in CAA 108(f), the EPA has acknowledged that improvements to bicycle paths and pedestrian walkways are RACM" and that the South Coast 2007 AQMD contains very few TCMs to implement such measures. As an example, NRDC claims that little more than 11 percent of the 1996 Los Angeles Bicycle Plan's proposed bike lanes have been implemented since its development. Finally, NRDC asserts that planning agencies have used the TCM process to "load the SIP with proposed highway expansion projects that will purportedly achieve emissions reductions" and that several of the plan's identified TCMs, such as the SR-47 diesel truck road expansion project, should not be included as TCMs because they will not actually reduce emissions.

Response: We disagree with NRDC's contention that any of the TCMs it has identified are required RACM for purposes of

attaining the 1997 PM_{2.5} standards in the South Coast or that the SCAQMD failed to adequately consider reasonably available TCMs as part of its RACM analysis. Under 40 CFR section 51.1010(b), "[p]otential measures that are reasonably available considering technical and economic feasibility must be adopted as RACM if, considered collectively, they would advance the attainment date by one year or more." NRDC asserts only generally that the 1996 Los Angeles Bicycle Plan is reasonably available for implementation in the South Coast considering technical and economic feasibility, and provides no information to support a conclusion that this or any other potential TCM would, individually or collectively with other reasonable measures, advance attainment of the 1997 PM_{2.5} standards by at least one year in the South Coast.²⁰

As discussed in our July 14, 2011 amended proposal, CARB, the SCAQMD, and the Southern California Association of Governments (SCAG)²¹ have conducted thorough analyses of all

²⁰ Appendix IV-C to the South Coast 2007 AQMP indicates that implementation of all of the TCMs in SCAG's Transportation Strategy (including transit and High Occupancy Vehicle (HOV) projects, in addition to bicycle and pedestrian projects) is expected to achieve the following total amounts of emission reductions: 0.18 tpd of direct PM_{2.5}, 3.48 tpd of NO_x, and 1.04 tpd of ROG (VOC). See South Coast 2007 AQMP, Appendix IV-C at Table 7. Assuming the 1996 Los Angeles Bicycle Plan, if fully implemented, would achieve only a fraction of these amounts of emission reductions, it is highly unlikely that this measure would advance attainment of the 1997 PM_{2.5} standard in the South Coast by at least a year. See Table I-1 in the TSD for a summary of the emission reductions that would achieve one year's worth of RFP (52.8 tpd of NO_x, 30.8 tpd of VOC, 1.1 tpd of PM_{2.5} and 2.8 tpd of SO_x).

²¹ SCAG is the metropolitan planning organization (MPO) responsible for the transportation strategy and transportation control measures in the South Coast nonattainment area.

reasonable control measures that are available for implementation in the South Coast and provided reasoned justifications for the collection of RACM that the State has adopted or committed to adopt, based on these analyses. See 76 FR 41562 at 41568-41572 and TSD at section II.D. With respect to TCMs in particular, SCAG evaluated potential measures identified by public commenters, measures adopted in other nonattainment areas, and potential measures identified by EPA. Bicycle projects were considered along with many other TCMs as part of the RACM analysis to determine if they alone or in combination with other measures would advance the attainment date. See South Coast 2007 AQMP, Appendix IV-C, p. 36-55. Attachment A to Appendix IV-C of the South Coast 2007 AQMP contains a list of the specific TCMs included as part of the South Coast 2007 AQMP. The 1996 LA Bicycle Plan is not a part of the approved SIP for the South Coast. When an individual bike project has funding for right-of-way or construction in the first two years of the Transportation Improvement Program (TIP), it is included in TCM-1, SCAG's overall TCM program.²² NRDC's comments do not change our conclusion that the State has adopted all RACM and RACT necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements

²² See record of conversation between Wienke Tax, EPA Region 9, and Jonathan Nadler, SCAG, September 19, 2011.

for the 1997 PM_{2.5} standards, as required by CAA section 172(c)(1) and 40 CFR section 51.1010. See 72 FR at 20612 (noting that although States must conduct thorough analyses of reasonably available measures, States are not required to analyze every conceivable measure to satisfy the RACM requirement in CAA section 172(c)(1)). SCAG included a description of the process used to identify the potential RACM measures considered. See South Coast 2007 AQMP, Appendix IV-C.

We also disagree with NRDC's characterization of EPA's transportation conformity regulations and EPA's position with respect to the TCMs identified in CAA section 108(f). EPA's transportation conformity regulations in 40 CFR part 93 establish the criteria and procedures for timely implementation of TCMs approved into a SIP, including the specific steps and funding sources needed to fully implement each TCM, but do not require adoption and implementation of any particular TCM. As to CAA section 108(f), we note that following the 1990 CAA Amendments EPA revised its previous interpretation of the RACM requirement by eliminating the presumption that all TCMs listed in CAA section 108(f) are RACM for all areas. See 57 FR 13598 at 13560 (April 16, 1992) (stating that "[l]ocal circumstances relevant to the reasonableness of any potential control measure involve practical considerations that cannot be made through a

national presumption" and that States should consider TCMs on an area-specific basis and "consider groups of interacting measures, rather than individual measures"). Thus, States are required to adopt only those TCMs identified in CAA section 108(f) that are reasonably available for implementation in the specific nonattainment area. *Id.* We note that EPA cannot require that any measure be listed in section 108(f) of the CAA, as only Congress is authorized to amend the CAA.

Finally, we agree that SR-47 should not be listed as a TCM. We understand from SCAG staff that the SR-47 project (Project ID LA0D45) was inadvertently included as a TCM in the 2007 SIP in a table labeled "System Management - Railroad Consolidation Programs," on page A-12 of Attachment A of Appendix IV-C of the South Coast 2007 AQMP. This error has been corrected and this project is no longer listed as a TCM in the 2008 RTIP.²³

Comment: NRDC asserts that the RACM/RACT analysis is deficient because it fails to provide any discussion of controls for condensable PM_{2.5} emissions. NRDC references 40 CFR section 51.1002(c) to support its assertion that "[t]he transition period allowing agencies to ignore controls on condensable emissions expired on January 1, 2011," and also quotes EPA's

²³ See electronic mail, Rongsheng Luo, SCAG, to Wienke Tax, US EPA Region 9, August 31, 2011.

statement in the preamble to the PM_{2.5} Implementation Rule (72 FR at 20652) that "[w]e expect States to address the control of direct PM_{2.5} emissions, including condensables with any new actions taken after January 1, 2011." NRDC states that EPA should advise CARB and the District that consideration of reasonably available controls on condensable emissions will be required in a revised RACM/RACT submittal.

Response: EPA's PM_{2.5} implementation rule states that "[a]fter January 1, 2011, for purposes of establishing emissions limits under 51.1009 and 51.1010, States must establish such limits taking into consideration the condensable fraction of direct PM_{2.5} emissions." 40 CFR section 51.1002(c). Prior to this date, the rule required that nonattainment area SIPs identify and evaluate sources of PM_{2.5} direct emissions and PM_{2.5} attainment plan precursors as part of the RFP and RACM/RACT demonstrations but did not specifically require states to address condensable PM_{2.5}. See *id.*²⁴ Because the attainment, RFP and RACM demonstrations in the South Coast 2007 AQMP and 2007 State Strategy were adopted on June 1, 2007 and September 27, 2007, respectively, California was not required to address condensable PM in establishing the emissions limits contained in these demonstrations as originally submitted, or in adopting any other PM emission limits under 40

²⁴ See also Letter dated April 25, 2011, from Lisa P. Jackson, EPA, to Paul Cort, EarthJustice, denying Petition for Reconsideration with respect to the deferral of the requirement to establish emission limits for CPM until January 1, 2011.

CFR sections 51.1009 and 51.1010 prior to January 1, 2011. Consistent with these requirements, EPA has evaluated the reasonable further progress (RFP) and reasonably available control measures (RACM) demonstrations in the South Coast 2007 AQMP and 2007 State Strategy and concluded that these elements of the Plan appropriately address all sources of direct PM_{2.5} emissions and PM_{2.5} attainment plan precursors (SO₂, NO_x, and VOC) in the South Coast area. See 76 FR 41562 at 41574.²⁵

The South Coast 2007 AQMP and 2007 State Strategy rely on several rules regulating direct PM emissions as part of the PM_{2.5} control strategy (e.g., Wood Burning Fireplaces (Rule 445, adopted March 7, 2008), Wood Stoves and Under-Fired Charbroilers (Rule 1138, adopted November 14, 1997), and Particulate Matter (PM) Control Devices (Rule 1155, adopted December 4, 2009)). See 2011 Progress Report, Appendix F, Table 4. EPA has not yet acted on any District rule adopted or revised after January 1, 2011 that regulates direct PM_{2.5} emissions. As part of our action on any such rule, we will evaluate the emission limits in the rule to ensure that they appropriately address condensable particulate matter (CPM), as required by 40 CFR section

²⁵ In our proposed rule, we noted that the SCAQMD has deferred limits for condensable particulate matter (CPM) in its rules but that this limited deferral does not affect the South Coast 2007 AQMP's RACM/RACT and expeditious attainment demonstrations. 76 FR 41562 at 41566, n. 13. We also noted that we would evaluate any PM_{2.5} rule adopted or revised by the District after January 1, 2011 to assure that it appropriately addresses CPM. See *id.*

51.1002(c). We note that the SIP-approved version of Rule 1138 requires testing according to the District's Protocol, which requires measurement of both condensable and filterable PM in accordance with SCAQMD Test Method 5.1. See Rule 1138 paragraph (c)(1) and (g) and SCAQMD Protocol paragraph 3.1.²⁶ We also note that the SIP-approved version of Rule 1155 requires measurement of both condensable and filterable PM in accordance with SCAQMD Test Methods 5.1, 5.2, or 5.3 as applicable. See SCAQMD Rule 1155 paragraph (e)(6).²⁷

Comment. NRDC asserts that the contingency measures in the South Coast 2007 AQMP should be included in the RACM/RACT demonstration.

Response: We disagree. For many of the same reasons that EPA is disapproving the contingency measures identified in the South Coast 2007 AQMP, many of these measures would not be approvable elements of a RACM/RACT demonstration and in any case are not required RACM for purposes of the 1997 PM_{2.5} NAAQS in the South

²⁶ See SCAQMD Protocol, *Determination of Particulate and Volatile Organic Compound Emissions from Restaurant Operations*, November 14, 1997 (available at [http://yosemite.epa.gov/R9/R9Testmethod.nsf/0/3D4DEB4D21AB4AAF882570AD005DFF69/\\$file/SC%20Rest%20emiss.pdf](http://yosemite.epa.gov/R9/R9Testmethod.nsf/0/3D4DEB4D21AB4AAF882570AD005DFF69/$file/SC%20Rest%20emiss.pdf)).

²⁷ See SCAQMD Test Method 5.1, *Determination of Particulate Matter Emissions from Stationary Sources Using a Wet Impingement Train*, March 1989 (available at <http://aqmd.gov/tao/methods/stm/stm-005-1.pdf>); SCAQMD Test Method 5.2, *Determination of Particulate Matter Emissions from Stationary Sources Using Heated Probe and Filter*, March 1989 (available at <http://aqmd.gov/tao/methods/stm/stm-005-2.pdf>); and SCAQMD Test Method 5.3, *Determination of Particulate Matter Emissions from Stationary Sources Using an in-Stack Filter*, October 2005 (available at <http://aqmd.gov/tao/methods/stm/stm-005-3.pdf>).

Coast. For example, for CTY-01, "Offsetting the Potential Emission Increase Due to the Change in Natural Gas Specifications," the District has provided neither cost effectiveness information nor information about the types or amounts of pollutant reductions this measure would achieve. Therefore, EPA cannot determine at this time whether such a measure is reasonably available considering technical or economic feasibility or whether it would contribute to advancing attainment of the 1997 PM_{2.5} NAAQS in the South Coast. The District characterizes the measure as an offsetting measure for potential increases in emissions, so it is not clear CTY-01 will provide any additional reductions of PM_{2.5} or PM_{2.5} plan precursors. See South Coast 2007 AQMP, Appendix IV-A, page 167. The reductions associated with CTY-02, "Clean Air Act Emission Fees for Major Stationary Sources," do not occur until after 2023, and therefore clearly would not contribute to advancing attainment date of the 1997 PM_{2.5} NAAQS. CTY-03, "Banning Pre-Tier 3 Off-Road Diesel Engines during High Pollution Days," similarly lacks quantification of emissions reductions and cost-effectiveness data. As we noted in our July 14, 2011 proposed rulemaking, CTY-04, "Accelerated Implementation of CARB's Mobile Source Control Measures," would require additional rulemaking at the District level and potentially substantial and lengthy additional rulemaking at the State level to be implemented. See

76 FR 41562, at 41579. Therefore, we do not believe the reductions could occur in time to advance the attainment date for the 1997 PM_{2.5} NAAQS. In summary, we have concluded that the contingency measures in the South Coast 2007 AQMP are not approvable as contingency measures under CAA section 172(c)(9) and for many of the same reasons, these measures are not required RACM for purposes of the 1997 PM_{2.5} NAAQS. Moreover, NRDC provides no information to support a claim that any of these measures would individually or collectively advance the attainment date of the South Coast area for the 1997 PM_{2.5} NAAQS by at least one year. 40 CFR section 51.1010.

E. Comments on CARB and District Control Measures

Comment: ARTBA requests that EPA designate this rulemaking as having nationwide scope or effect pursuant to CAA section 307(b)(1) based on its belief that certain California statewide measures include in-use controls that are inconsistent with section 209 of the CAA and that are adoptable by states outside not only California but also EPA Region IX. ARTBA notes that the D.C. Circuit has never addressed many of the preemption issues raised below. Accordingly, ARTBA concludes that the section 307(b)(1) determination is necessary to ensure nationwide uniformity in the interpretation and enforcement of these important CAA preemption issues.

Response: CAA section 307(b)(1) generally provides that judicial review of EPA action in approving a SIP or SIP revision may be filed only in the U.S. Court of Appeals for the appropriate circuit. Thus, final EPA actions on revisions to the California SIP, such as the South Coast PM_{2.5} Plan, are generally subject to timely challenges filed in the U.S. Court of Appeals for the Ninth Circuit. However, judicial review of an EPA SIP action may be filed only in the U.S. Court of Appeals for the District of Columbia if such action is based on a determination of nationwide scope or effect and if, in taking such action, the EPA finds and publishes that such action is based on such a determination.

We do not believe that our action approving the South Coast PM_{2.5} Plan as a revision to the California SIP is based on a determination of "nationwide scope or effect." ARTBA does not identify which specific state in-use controls the association is referring to, but we assume ARTBA is referring to CARB's in-use truck rule and drayage truck rule, CARB's in-use nonroad equipment rule, and CARB's rule regarding ships at port, and CARB's commercial harbor craft rule (which are referred to in the plan as "cleaner in-use heavy-duty trucks," "cleaner in-use off-road equipment (> 25 ph)"), "ship auxiliary engine cold ironing & clean technology," and "clean up existing harbor

craft."). While we recognize that the plan relies on these state in-use controls to demonstrate attainment of the PM_{2.5} NAAQS in the South Coast, the specific in-use controls themselves are not the subject of today's action. In other words, we are not taking action to approve the in-use controls as a part of the action we are taking today on the plan, but anticipate final action on the in-use controls in other final actions. Moreover, our action today relates to only two regions within the state of California, and the provisions reviewed are specific to California. Today's decision does not affect any other State. Thus, our approval of the plan under CAA section 110 is not one of "nationwide scope or effect."

With respect to nonroad vehicles and equipment, to the extent section 209(e) is at all relevant, other states are free to adopt and enforce California in-use emissions standards and other related requirements, but only after EPA has authorized the California standards under CAA section 209(e)(2)(A). See CAA section 209(e)(2)(B). EPA is not any taking action in this document under section 209(e), and thus the potential widespread effect that concerns ARTBA will not occur as a consequence of this rulemaking. Moreover, such State action would be a separate action by a separate State and would be handled separately.

With respect to on-road engines and vehicles, California and the other states have the same authority, and are subject to the same limitations, in establishing in-use emissions standards and other related requirements and thus, even if EPA were to be approving California's on-road in-use emissions standards in this rulemaking, which it is not, the potential for nationwide effect would not occur as a consequence of this rulemaking.

While any action taken by EPA in one rulemaking may have some precedential effect on other actions, this does not make every action taken by EPA an action of "nationwide scope or effect." This action applies only in California and is relevant only to a particular California-specific PM_{2.5} plan. Therefore, we disagree that today's action on the South Coast PM_{2.5} Plan would be of "nationwide scope or effect."

Comment: ARTBA asserts that the lawfulness of the California and SCAQMD measures will hinge on litigation between ARTBA and EPA currently underway in the Ninth Circuit, No. 11-71897, and the D.C. Circuit, No. 11-1256, and ARTBA requests that EPA stay action on this proceeding pending the resolution of ARTBA's litigation. ARTBA further requests that, because ARTBA is litigating the nationwide standards under which EPA will decide the important preemption issues in this case and because EPA's decision on California measures would lead to other states'

adopting (or being compelled to adopt) California measures as RFP for their SIPs, EPA stay consideration of nonroad rules pending resolution of the ARTBA litigation.

Response: In settlement of a lawsuit seeking to compel EPA action on the 2007 South Coast AQMP and related portions of the 2007 State Strategy [*Natural Resources Defense Council v. EPA*, No. 2:10-cv-06029 (C.D. Cal.)], which includes the South Coast PM_{2.5} Plan, EPA is subject to a consent decree deadline of September 30, 2011 to take final action on the South Coast PM_{2.5} Plan, and thus, any stay of the rulemaking beyond that date is not possible. In any event, other than the general preemption issues that ARTBA has raised, and that EPA has addressed in various forums, the current lawsuit cited above by ARTBA challenges EPA's approval of the San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD's) Rule 9510 ["Indirect Source Review (ISR)"], which turns on an interpretation of CAA section 110(a)(5), which is not germane to EPA's action on the South Coast PM_{2.5} Plan.

Comment: ARTBA states that California has adopted a novel series of statewide measures that set emission standards and other requirements for in-use on-road and nonroad vehicles and fleets of those vehicles. In addition to seeking credit for these statewide measures, ARTBA notes that SCAQMD also seeks

credit for that district's local implementation of the Surplus Off-Road Opt-In for NOx ("SOON") program under which large construction fleets must seek "SOON" funding to acquire clean-than-required equipment, with the cost partially deferred by government funds and that the South Coast PM_{2.5} Plan also includes a contingency measure (CTY-03) that would ban pre-Tier 3 off-road diesel engines on "high pollution advisory" days.

ARTBA asserts that all of these measures share the characteristic of setting fleetwide standards for CAA-required vehicles that differ from - and are more stringent than - the various standards and other requirements that title II of the CAA applies to those vehicles, and concludes that the California statewide measures that rely on in-use controls or impose in-use fleet measures are preempted. With respect to California's in-use controls for construction and other diesel-powered equipment, ARTBA believes that preemption applies both for equipment above and below the 175-horsepower threshold and that the proposed contingency measures (CTY-03) to ban pre-Tier 3 off-road diesel engines on "high pollution advisory" days is a preempted in-use standard - particularly for equipment under 175 horsepower - for the same reasons. Because these SIP and contingency measures are beyond California's and SCAQMD's

authority, ARTBA believes that CAA section 110(a)(2)(E)(i) prohibits EPA's approving these measures as part of the SIP.

Response: In relevant part, CAA section 110(a)(2)(E) requires SIPs to provide necessary assurances that the State will have adequate authority under State law to carry out a SIP and is not prohibited by any provision of Federal or State law from carrying out such SIP. As a general matter, we agree that States must provide such assurances for SIPs and SIP revisions. In the CARB Resolution approving the plan, the State of California provided the necessary assurances of adequate legal authority to implement the South Coast PM_{2.5} Plan. See CARB Resolution 07-41 (September 27, 2007).

To the extent that ARTBA challenges EPA's approval of the South Coast PM_{2.5} Plan based on the plan's reliance on the emission standards and other requirements for in-use on-road measures, such as CARB's truck rule and drayage truck rule, we expect to approve the rules into the SIP prior to the effective date of this action, and no comments have been received on our proposed approval of the rules [76 FR 40652 (July 11, 2011)] that call into question the authority of the State to enforce those rules. To the extent that ARTBA challenges EPA's approval of the plan based on the plan's reliance on standards and other preempted requirements for in-use nonroad vehicles, we simply

note that EPA authorizations under CAA section 209(e) bestow enforceability on the State of California as to the emissions standards and other requirements covered by the authorizations. We anticipate EPA action on CARB's authorization requests for the in-use nonroad rules upon which the plan relies prior to the effective date of today's action.²⁸ These rules are needed to support emissions reduction credit for certain State measures, including "cleaner in-use off-road equipment (> 25 hp)," "ship auxiliary engine cold ironing & clean technology," and "clean up existing harbor craft." See table 5 on page 41571 of the July 14, 2011 proposed rule. If the authorizations are issued, there will be no prohibition under any Federal law that we are aware of that would prevent California from enforcing the related standards and achieving the associated emissions reductions relied upon by the plan. If EPA denies CARB's authorization requests for the in-use nonroad rules, or if no decision is forthcoming, prior to the effective date of today's action, we will take appropriate remedial action to ensure that our action on the plan is fully supportable or to reconsider that action.

²⁸ The notices of opportunity for public hearing and comment on the relevant requests for authorizations were published at 73 FR 58585 (October 7, 2008), 73 FR 67509 (November 14, 2008), and 75 FR 11880 (March 12, 2010) for CARB's in-use nonroad equipment rule; at 76 FR 38153 (June 29, 2011) for CARB's in-use commercial harbor craft rule; and at 76 FR 38155 (June 29, 2011) for CARB's at-berth rule that is intended to reduce emissions from auxiliary diesel engines on ocean-going marine vessels at-berth in California ports.

With respect to SCAQMD's SOON program, EPA notes that the District implements the SOON program through its Rule 2449 ("Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles"), adopted May 2, 2008. SCAQMD Rule 2449 has been submitted to EPA for approval into the SIP (submittal date July 18, 2008), but EPA has not taken any action on that submittal, nor is EPA taking action on Rule 2449 in connection with today's action on the South Coast PM_{2.5} Plan. We recognize that the South Coast PM_{2.5} Plan does take emissions reduction credit for the SOON program, but EPA has not allowed the credit in taking action on the plan, and thus the issue of the enforceability of the associated emissions reductions is not germane to our approval of the plan.

With respect to the contingency measure referred to as CTY-03, which ARTBA opposes, EPA proposed to disapprove the contingency measures, including CTY-03, see 76 FR at 41579, and is finalizing that proposed disapproval in today's document.

Comment: ARTBA provides a lengthy discussion of the principles of Federal preemption in the context of State regulation of emissions from mobile sources under the Clean Air Act and its various amendments over time. In so doing, ARTBA identifies a number of instances where ARTBA's interpretation of the CAA and

relevant case history differs from that of EPA and offers a number of legal arguments supporting its views.

Response: Except to the extent we have discussed above, ARTBA does not tie this discussion of preemption to the SIP action EPA is taking today, namely, final partial approval and partial disapproval of the South Coast PM_{2.5} Plan and related portions of the 2007 State Strategy. For this reason, and because EPA has addressed ARTBA's general comments on preemption several times in earlier proceedings, we are not addressing those general comments here.

Comment: AAR asserts that CARB's control measure known as ARB-OFRD-02 anticipates a 90% NO_x and PM reduction from the uncontrolled baseline and projects a 4.3 tons per day (tpd) of NO_x emissions reductions in the South Coast by 2014. AAR further asserts that, as such, ARB-OFRD-02 is not consistent with the timeframe and emission reductions levels contained in EPA's regulations for achieving emissions reductions from locomotive engines and locomotive fuel.

Response: ARB-OFRD-02 is the identifier used in the 2007 South Coast AQMP to refer to the State measure known as "Accelerated Introduction of Cleaner Locomotives." The State's measure anticipates that EPA's "tier 4" locomotive standards, proposed in 2007 and promulgated in 2008 (73 FR 25098, May 6, 2008),

would likely not provide significant additional emissions reductions of NO_x and PM from locomotives in the time necessary to contribute to attainment of the PM_{2.5} NAAQS in the South Coast given an attainment date of 2015. Thus, the control measure calls for CARB staff "to work with the railroads to bring the cleanest locomotives into California service" (Revised Draft State Strategy (April 26, 2007), page 114). As noted by AAR, the 2007 State Strategy estimates a reduction of NO_x of 4.3 tons per day (tpd) in 2014 in the South Coast due to this measure. See page 61 of Revised Draft State Strategy (April 26, 2007). However, the State Strategy indicates that such estimates are for informational purposes only. CARB has not committed to achieving the 4.3 tpd reduction specifically from this measure but has committed to aggregate emissions reductions that would be achieved through any combination of measures.

Since adoption of the 2007 State Strategy, CARB staff have been working with neighborhood groups, the railroads, and other interested stakeholders to, among other things, develop emissions reduction targets at certain rail yards in the South Coast to which the railroads would commit (referred to as the "2010 Commitments"). See CARB Resolution 10-29 (June 24, 2010). Final approvals of the 2010 Commitments are still being negotiated, and there are no plans to submit the 2010

Commitments as a part of the SIP; thus, our proposed approval of the attainment demonstration for PM_{2.5} Plan does not rely on any emissions reductions from this control measure (see 76 FR 41562, July 14, 2011, at 41571, Table 5), nor does today's final approval. Therefore, the difference in the timing of emissions reductions under ARB-OFRD-02 relative to those expected under EPA's locomotive regulations does not undermine our approval of the South Coast PM_{2.5} Plan.

F. Comments on Enforceable Commitments

Comment: California Communities Against Toxics, Communities for a Better Environment, Natural Resources Defense Council and Physicians for Social Responsibility - Los Angeles (commenters) assert that the South Coast PM_{2.5} Plan fails to include enforceable control measures that meet the requirements of the CAA and that EPA cannot rely on "enforceable commitments" as a substitute for adopted control measures to "close the shortfall in the control strategy." Commenters claim that EPA's action "breaks with its long-standing interpretation that an attainment SIP must include currently adopted emissions limitations and other control measures" that achieve the needed emissions reductions. Specifically, commenters state that CAA sections 110(a)(2)(A) and 172(c)(6) require SIPs to contain "enforceable emission limitations ... as may be necessary or appropriate" to

achieve attainment. Commenters note that CAA section 110(k)(4) allows EPA to grant "conditional approval" of a SIP lacking certain statutory elements "based on a commitment of the state to adopt specific enforceable measures" by a certain date, and that this provision provides that the conditional approval automatically becomes a disapproval if the State fails to comply with the commitment within one year. Commenters state that courts have rejected similar attempts to circumvent the statute's limitations on conditional approvals and cite *Sierra Club v. EPA*, 356 F.3d 296, 298 (D.C. Cir. 2004) as overturning EPA's conditional approval of SIPs based in part on the fact that the commitments identified no specific measures the state would implement. In further support of their assertions that EPA may not allow States to submit "promises to develop unspecified future enforceable measures as a substitute for" enforceable control measures, the commenters reference CAA sections 107(a), 110(a)(1), 110(a)(2)(A), 110(a)(2)(C), the nonattainment plan requirements of part D, title I of the Act, EPA regulations in 40 CFR part 51, and EPA's General Preamble for the Implementation of Title I of the Clean Air Act Amendments (57 FR 13498, 13567 (April 16, 1992)).

Response: As pertinent to the comment, *Sierra Club* involved EPA's conditional approval under section 110(k)(4) of SIPs

lacking in their entirety RACM and ROP demonstrations and contingency measures based on letters submitted by states that committed to cure these deficiencies. The court rejected EPA's construction of section 110(k)(4) as contrary to the unambiguous statutory language requiring the state to commit to adopt *specific* enforceable measures. *Sierra Club* at 302. The court found that EPA's construction turned the section 110(k)(4) conditional approval into a means of circumventing SIP deadlines. *Id.* At 303.

EPA does not dispute the holding of *Sierra Club*. However that case is not germane to EPA's approval of CARB's and the District's commitments here because the Agency is not approving those commitments under section 110(k)(4). The relevant precedent is instead *BCCA Appeal Group v. EPA*, 355 F.3d 817 (5th Cir. 2003) (*BCCA*). The facts in *BCCA* were very similar to those presented here. In *BCCA*, EPA approved an enforceable commitment in the Houston ozone SIP to adopt and implement unspecified NOx controls on a fixed schedule to achieve aggregate emission reductions. Petitioners claimed that EPA lacked authority under the CAA to approve a SIP containing an enforceable commitment to adopt unspecified control measures in the future. The court disagreed and found that section 110(k)(4) conditional approvals

do not supplant EPA's practice of fully approving enforceable commitments:

Nothing in the CAA speaks directly to enforceable commitments. The CAA does, however, provide EPA with great flexibility in approving SIPs. A SIP may contain "enforceable emission limitations and other control measures, means, or techniques . . . as well as schedules and timetables for compliance, as may be necessary or appropriate" to meet the CAA's requirements.... Thus, according to the plain language of the statute, SIPs may contain "means," "techniques" and/or "schedules and timetables for compliance" that the EPA considers "appropriate" for attainment so long as they are "enforceable." See *id.* section 7410(a)(2)(A). "Schedules and timetables" is broadly defined as "a schedule of required measures including an enforceable sequence of actions or operations leading to compliance with an emission limitation, prohibition or standard." 42 U.S.C. section 7602(p). The remaining terms are not defined by the Act. Because the statute is silent on the issue of whether enforceable commitments are appropriate means, techniques, or schedules for attainment, EPA's

interpretation allowing limited use of an enforceable commitment in the Houston SIP must be upheld if reasonable.

BCCA at 839-840. The court upheld EPA's approval of the commitment, finding that "EPA reasonably concluded that an enforceable commitment to adopt additional control measures on a fixed schedule was an 'appropriate' means, technique, or schedule or timetable for compliance" under sections 110(a)(2)(A) and 172(c)(6). *Id.* at 841. Thus the court recognized that sections 110(a)(2)(A) and 172(c)(6) provide a basis for EPA to approve enforceable commitments as distinct from the commitments contemplated by section 110(k)(4) which are not in fact enforceable but instead lead to SIP disapproval if not honored. See also *Environmental Defense v. EPA*, 369 F.3d 193, 209-210 (2nd Cir. 2004) (similarly upholding enforceable SIP commitments). As a result, contrary to commenters' contention, section 110(k)(4) is not a bar to EPA's approval of CARB's and the District's enforceable commitments and that approval under section 110(k)(3) is permissible as an appropriate means, technique or schedule or timetable for compliance under sections 110(a)(2)(A) and 172(c)(6).

Comment: Commenters state that EPA has not determined whether the commitments are in fact enforceable. Commenters state that

courts "may only enforce SIP strategies" and that "[m]ere approval of an aspirational goal or non-specific promise into the SIP does not convert that goal or promise into an enforceable commitment." In support of these assertions, commenters cite *Bayview Hunters Point Community Advocates v. Metropolitan Transp. Comm'n*, 366 F.3d 692, 701 (9th Cir. 2004) and *Citizens for a Better Environment v. Metropolitan Transp. Comm'n*, 746 F. Supp. 976, 980 (N.D.Cal. 1990) [known as CBE II]. In addition, commenters single out *El Comite Para El Bienstar de Earlimart v. Warmerdam*, 539 F.3d 1062, 1067 (9th Cir. 2008), stating that in *El Comite* the court explained that because an inventory in a SIP is not a "standard or limitation" as defined by the CAA, it was not an independently enforceable aspect of the SIP. Thus, the commenters reason, in order to be enforceable, not only must a state's commitment to adopt additional measures to attain emission standards be specific and announced in plain language, but any data or rubric that will be used to determine when and how the state will adopt those measures must be enforceable. Commenters state that the commitments in the South Coast SIP are so vague that they cannot possibly be enforced against the State and that there is no requirement that the State take any specific actions. The commenters conclude that the commitments cannot be considered enforceable under Ninth Circuit case law, because they are not

strategies based on enforceable emissions standards or limitations.

Response: Under CAA section 110(a)(2)(A), SIPs must include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the Act, as well as timetables for compliance. Similarly, section 172(c)(6) provides that nonattainment area SIPs must include enforceable emission limitations and such other control measures, means or techniques "as may be necessary or appropriate to provide for attainment" of the NAAQS by the applicable attainment date.

Control measures, including commitments in SIPs, are enforced directly by EPA under CAA section 113 and also through CAA section 304(a), which provides for citizen suits to be brought against any person who is alleged "to be in violation of ... an emission standard or limitation...." "Emission standard or limitation" is defined in subsection (f) of section 304.²⁹ As observed in *Conservation Law Foundation, Inc. v. James Busey et al.*, 79 F.3d 1250, 1258 (1st Cir. 1996):

Courts interpreting citizen suit jurisdiction have largely focused on whether the particular standard or requirement plaintiffs sought to enforce was sufficiently specific.

²⁹ EPA can also enforce SIP commitments pursuant to CAA section 113.

Thus, interpreting citizen suit jurisdiction as limited to claims "for violations of specific provisions of the act or specific provisions of an applicable implementation plan," the Second Circuit held that suits can be brought to enforce specific measures, strategies, or commitments designed to ensure compliance with the NAAQS, but not to enforce the NAAQS directly. See, e.g., *Wilder*, 854 F.2d at 613-14. Courts have repeatedly applied this test as the linchpin of citizen suit jurisdiction. See, e.g., *Coalition Against Columbus Ctr. v. City of New York*, 967 F.2d 764, 769-71 (2d Cir. 1992); *Cate v. Transcontinental Gas Pipe Line Corp.*, 904 F. Supp. 526, 530-32 (W.D. Va. 1995); *Citizens for a Better Env't v. Deukmejian*, 731 F. Supp. 1448, 1454-59 (N.D. Cal.), modified, 746 F. Supp. 976 (1990).

Thus courts have found that the citizen suit provision cannot be used to enforce the aspirational goal of attaining the NAAQS, but can be used to enforce specific strategies to achieve that goal including enforceable commitments to develop future emissions controls.

We describe CARB's and the District's commitments in the 2007 State Strategy (revised in 2009 and 2011) and the 2007 AQMP in detail in our proposal and amended proposal (75 FR 71294 and

76 FR 41562). The 2007 State Strategy includes commitments to propose defined new measures and an enforceable commitment for emissions reductions sufficient, in combination with existing measures and the District's commitments, to attain the PM_{2.5} NAAQS in the South Coast by April 5, 2015. For the South Coast, the State's emissions reductions commitments, as submitted in 2007 and revised by the 2009 State Strategy Update were to achieve 152 tpd NOx, 46 tpd VOC, 9 tpd of direct PM_{2.5} and 20 tpd SOx in the South Coast area by 2014. See 76 FR 41562, at 41572; 2009 State Strategy Status Report, p. 20.³⁰

The SCAQMD's commitments as submitted in 2007 (and revised in 2011) were to achieve 10.8 tpd NOx, 10.4 tpd VOC, 2.9 tpd direct PM_{2.5} and 2.9 tpd SOx by 2014. See 76 FR 41562, Table 2, at 41569; see also 2011 Progress Report, Appendix F, Table 1, and SCAQMD Board Resolution 11-9, March 4, 2011. As discussed above, the 2011 SIP revisions revised the State's total emissions reduction commitments to 129 tpd of NOx, 44 tpd of VOC, 9 tpd of PM_{2.5}, and 41 tpd of SOx, which the State remains obligated to achieve through the adoption of enforceable measures by 2014. See TSD, Table F-9; see also CARB Resolution 07-28, Attachment B at p. 4.

³⁰ We note that in our proposed rule at 76 FR 41562, p. 41571 we reference the 2007 State Strategy, p. 63 and CARB Resolution 07-28, Attachment B. p.6. Page 63 of the 2007 State Strategy was replaced with the information in the 2009 State Strategy Status Report.

Thus, CARB's commitments are clearly distinguishable from the aspirational goals, i.e., the SIP's overall objectives, identified by the *Bayview* court and cited by the commenter. CARB's commitments here are to adopt and implement measures that will achieve specific reductions of NO_x, VOC, direct PM_{2.5} and SO_x emissions by 2014. These are not mere aspirational goals to ultimately achieve the standards. Rather, the State and District have committed to adopt enforceable measures no later than 2014 that will achieve these specific amounts of emission reductions prior to the attainment date of April 5, 2015. All of these control measures are subject to State and local rulemaking procedures and public participation requirements, through which EPA and the public may track the State/District's progress in achieving the requisite emission reductions. EPA and citizens may enforce these commitments under CAA sections 113 and 304(a), respectively, should the State/District fail to adopt measures that achieve the requisite amounts of emission reductions by the beginning of 2014. See 40 CFR section 51.1007(b) (requiring implementation of all control measures needed for expeditious attainment no later than the beginning of the year prior to the attainment date). We conclude that these enforceable commitments to adopt and implement additional control measures to achieve aggregate emission reductions on a fixed schedule are

appropriate means, techniques, or schedules for compliance under sections 110(a)(2)(A) and 172(c)(6) of the Act.

Commenters cite *Bayview* as support for their contention that the plan's commitments are unenforceable aspirational goals. *Bayview* does not, however, provide any such support. That case involved a provision of the 1982 Bay Area 1-hour ozone SIP, known as TCM 2, which states in pertinent part:

Support post-1983 improvements identified in transit operator's 5-year plans, after consultation with the operators adopt ridership increase target for 1983-1987.

EMISSION REDUCTION ESTIMATES: These emission reduction estimates are predicated on a 15% ridership increase. The actual target would be determined after consultation with the transit operators.

Following a table listing these estimates, TCM 2 provided that "[r]idership increases would come from productivity improvements..."

Ultimately the 15% ridership estimate was adopted by the Metropolitan Transportation Commission (MTC), the implementing agency, as the actual target. Plaintiffs subsequently attempted to enforce the 15% ridership increase. The court found that the 15% ridership increase was an unenforceable estimate or goal.

In reaching that conclusion, the court considered multiple factors, including the plain language of TCM 2 (e.g., "[a]greeing to establish a ridership 'target' is simply not the same as promising to attain that target," *Bayview* at 698); the logic of TCM 2, i.e., the drafters of TCM 2 were careful not to characterize any given increase as an obligation because the TCM was contingent on a number of factors beyond MTC's control, *id.* at 699; and the fact that TCM 2 was an extension of TCM 1 that had as an enforceable strategy the improvement of transit services, specifically through productivity improvements in transit operators' five-year plans, *id.* at 701. As a result of all of these factors, the Ninth Circuit found that TCM 2 clearly designated the productivity improvements as the only enforceable strategy. *Id.* at 703.

The commitments in the 2007 State Strategy (revised in 2009 and 2011) and South Coast 2007 AQMP are in stark contrast to the ridership target that was deemed unenforceable in *Bayview*. The language in CARB's and the District's commitments, as stated multiple times in multiple documents, is specific; the intent of the commitments is clear; and the strategy of adopting measures to achieve the required reductions is completely within CARB's and the District's control. Furthermore, as stated previously, CARB and the District identify specific emission reductions that

they could achieve, how they could be achieved and the time by which these reductions will be achieved, i.e., by 2014.

Commenters also cite *CBE II* at 980 for the proposition that courts can only enforce "express" or "specific" strategies. However, as discussed below, there is nothing in the *CBE* cases that supports the commenter's view that the CARB and District commitments are neither express nor specific. In fact, these cases support our interpretation of CARB's and the District's commitments.

Citizens for a Better Environment v. Deukmejian, 731 F.Supp.1448 (N.D. Cal. 1990), known as *CBE I*, concerned in part contingency measures for the transportation sector in the 1982 Bay Area 1-hour ozone SIP. The provision states: "If a determination is made that RFP is not being met for the transportation sector, MTC will adopt additional TCMs within 6 months of the determination. These TCMs will be designed to bring the region back within the RFP line." The court found that "[o]n its face, this language is both specific and mandatory." *Id.* at 1458. In *CBE I*, CARB and MTC argued that TCM 2 could not constitute an enforceable strategy because the provision fails to specify exactly what TCMs must be adopted. The court rejected this argument, finding that "[w]e discern no principled basis, consistent with the Clean Air Act, for

disregarding this unequivocal commitment simply because the particulars of the contingency measures are not provided. Thus we hold that that the basic commitment to adopt and implement additional measures, should the identified conditions occur, constitutes a specific strategy, fully enforceable in a citizens action, although the exact contours of those measures are not spelled out." *Id.* at 1457.³¹ In concluding that the transportation and stationary source contingency provisions were enforceable, the court stated: "Thus, while this Court is not empowered to enforce the Plan's overall objectives [footnote omitted; attainment of the NAAQS]--or NAAQS--directly, it can and indeed, must, enforce specific strategies committed to in the Plan." *Id.* at 1454.

Commenters' reliance on *CBE II* is misplaced. It also involves in part the contingency measures in the 1982 Bay Area Plan. In *CBE II*, defendants argued that RFP and the NAAQS are coincident because, had the plan's projections been accurate, then achieving RFP would have resulted in attainment of the NAAQS. The court rejected this argument, stating that:

³¹ In this passage, the court was referring specifically to the stationary source contingency measures in the Bay Area plan which contained a commitment to adopt such measures if emission targets were not met. The Plan identified a number of potential stationary sources but did not commit to any particular one. In discussing the transportation contingency measures, the court applied this same reasoning. *Id.* at 1456-1457.

the Court would be enforcing the *contingency plan*, an express strategy for attaining NAAQS. Although enforcement of this strategy might possibly result in attainment, it is distinct from simply ordering that NAAQS be achieved without anchoring that order on any specified strategy. Plainly, the fact that a specified strategy might be successful and lead to attainment does not render that strategy unenforceable.

(Emphasis in original). *CBE II* at 980.

CARB's commitments here are analogous to the terms of the contingency measures in the *CBE* cases. CARB and the District commit to adopt measures, which are not specifically identified, to achieve a specific tonnage of emission reductions. Thus, the commitment to a specific tonnage reduction is comparable to a commitment to achieve RFP. Similarly, a commitment to achieve a specific amount of emission reductions through adoption and implementation of unidentified measures is comparable to the commitments to adopt unspecified TCMs and stationary source measures. The key is that a commitment must be clear in terms of what is required, e.g., a specified amount of emission reductions or the achievement of a specified amount of progress (i.e., RFP). CARB's and the District's commitments are thus

clearly a specific enforceable strategy rather than an unenforceable aspirational goal.

Commenter's reliance on *El Comite* is also misplaced. The plaintiffs in the district court attempted to enforce a provision of the 1994 California 1-hour ozone SIP known as the Pesticide Element. The Pesticide Element relied on an inventory of pesticide VOC emissions to provide the basis to determine whether additional regulatory measures would be needed to meet the SIP's pesticides emissions target. To this end, the Pesticide Element provided that "CARB will develop a baseline inventory of estimated 1990 pesticidal VOC emissions based on 1991 pesticide use data...." *El Comite Para El Bienestar de Earlimart v. Helliker*, 416 F. Supp. 2d 912, 925 (E.D. Cal. 2006). CARB subsequently employed a different methodology which it deemed more accurate to calculate the baseline inventory. The plaintiffs sought to enforce the commitment to use the original methodology, claiming that the calculation of the baseline inventory constitutes an "emission standard or limitation." The district court disagreed:

By its own terms, the baseline identifies emission sources and then quantifies the amount of emissions attributed to those sources. As defendants argue, once the sources of air pollution are identified, control strategies can then

be formulated to control emissions entering the air from those sources. From all the above, I must conclude that the baseline is not an emission "standard" or "limitation" within the meaning of 42 U.S.C. section 7604 (f)(1)-(4).

Id. at 928. In its opinion, the court distinguished *Bayview* and *CBE I*, pointing out that in those cases "the measures at issue were designed to reduce emissions." *Id.*

On appeal, the plaintiffs shifted their argument to claim that the baseline inventory and the calculation methodology were necessary elements of the overall enforceable commitment to reduce emissions in nonattainment areas. The Ninth Circuit agreed with the district court's conclusion that the baseline inventory was not an emission standard or limitation and rejected plaintiffs' arguments attempting "to transform the baseline inventory into an enforceable emission standard or limitation by bootstrapping it to the commitment to decide to adopt regulations, if necessary." *Id.* at 1073.

While commenters cite the Ninth Circuit's *El Comite* opinion, its utility in analyzing the CARB and District commitments here is limited to that court's agreement with the district court's conclusion that neither the baseline nor the methodology qualifies as an independently enforceable aspect of the SIP. Rather, it is the district court's opinion, in

distinguishing the commitments in *CBE* and *Bayview*, that provides insight into the situation at issue in our action. As the court recognized, a baseline inventory or the methodology used to calculate it, is not a measure to reduce emissions. It instead "identifies emission sources and then quantifies the amount of emissions attributed to those sources." In contrast, as stated previously, in the 2007 State Strategy (revised 2009 and 2011) and 2007 AQMP, CARB and the District commits to adopt and implement measures sufficient to achieve specified emission reductions by a date certain. As described above, a number of courts have found commitments substantially similar to CARB's here to be enforceable under CAA section 304(a).

Comment: Commenters state that the commitments do not satisfy EPA's three-part test for enforceable commitments. First, commenters state that EPA admits that the State and District have no idea at all how they will achieve the remaining 11% of the NO_x, 3% of VOC and 8% of PM_{2.5}. Commenters state that this is hardly a "limited" or minimal portion of the long-overdue reductions and cite *BCCA Appeal Group v. EPA*, 355 F.3d 817, 840-41 (5th Cir. 2003) (commitments for only six percent of the overall reductions). Commenters state it is arbitrary and capricious for EPA to conclude that 11% is approximately within the 10% range that EPA has historically accepted in approving

attainment demonstrations. Commenters believe EPA's strategy trivializes the task of achieving 70 tpd of reductions over the next 3 years and believes it is even more arbitrary given the importance of NO_x reductions for attainment.

Response: We disagree with the commenters' assertion that CARB and the District do not know how they will achieve the remaining NO_x, VOC, and PM_{2.5} reductions needed for attainment in the South Coast. As discussed in our amended proposal, the South Coast 2007 AQMD relies principally on adopted rules approved into the SIP or given a waiver under CAA section 209 to achieve the emissions reductions needed to attain the 1997 PM_{2.5} standards in the South Coast by April 5, 2015, including baseline (pre-2007) measures that continue to achieve emission reductions through 2014. 76 FR at 41576. The balance of the needed reductions is currently in the form of enforceable commitments that account for 11% of the NO_x, 7% of the VOC and 8% of the PM_{2.5} emission reductions needed from 2002 levels to attain.³² See *id.* These SIP-approved or CAA-waived control measures and enforceable commitments satisfy the requirement in CAA section 110(a)(2)(A) to include "enforceable emission limitations and other control measures, means or techniques . . . as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements" of the CAA. See *id.* at n. 31.

³² See Table 3 of this notice.

Although CARB's and the District's enforceable commitments to additional emission reductions are expressed in aggregate tonnages and not tied to specific measures, both CARB and the District have provided a list of potential measures that may achieve the additional reductions needed to attain the standards, together with expeditious rule development, adoption, and implementation schedules. *See id.* at 41576, 41577.

We also disagree with the commenters' assertions that these remaining amounts are not "limited" and that it is arbitrary and capricious for EPA to conclude that 11% is approximately within the 10% range that EPA has historically accepted as appropriate for enforceable commitments in approving attainment demonstrations. The State of Texas' enforceable commitment for the Houston/Galveston area, the approval of which was upheld by the Fifth Circuit Court of Appeals in *BCCA*, represented 6 percent of the reductions needed for attainment in the area. We note that the court in *BCCA* did not conclude that any amount greater than 6 percent of the reductions needed would be unreasonable. We believe that the 11% of NO_x, 7% of VOC and 8% of PM_{2.5} reductions, as stated in our amended proposal, also fit within the parameters of a "limited" amount of the reductions needed for attainment and nothing in the *BCCA* decision contravenes that. *See also* 76 FR 41562 at 41576, n. 34.

Finally, we disagree with the commenters' assertion that EPA's strategy "trivializes" the task of achieving 70 tpd of NO_x reductions over the next three years. As explained in our amended proposal, CARB has adopted and submitted a 2009 State Strategy Status Report and a 2011 Progress Report, which update and revise the 2007 State Strategy. These reports show that CARB has made significant progress in meeting its enforceable commitments for the South Coast and several other nonattainment areas in California. Additional ongoing programs that address locomotives, recreational boats, and other measures have yet to be quantified but are expected to reduce NO_x and direct PM_{2.5} emissions in the South Coast by 2014. See 2011 Progress Report, Appendix E, page 2. The District has already exceeded its commitment for reducing VOC and SO_x emissions and is working to meet the commitment to reduce NO_x and directly-emitted PM_{2.5}. See Tables 2 and 3. The District is also continuing to work to identify and adopt additional measures that will reduce emissions. Beyond the rules discussed above, both CARB and the District have well-funded incentive grant programs to reduce emissions from the on- and offroad engine fleets. Reductions from several of these programs have yet to be quantified and/or credited in the attainment demonstration. Finally, we note that the South Coast has experienced significant improvements in its PM_{2.5} air quality in the past few years.

Given the evidence of the State's and District's efforts to date and their continuing efforts to reduce emissions, we conclude that the State and District are capable of meeting their enforceable commitments to achieve the necessary reductions needed to attain the 1997 PM_{2.5} standards in the South Coast nonattainment area by April 5, 2015.

Comment: For the second factor, commenters state that the State has not shown that they are capable of achieving its reductions because they have done little more than assert that they are committed to meeting the requirements of federal law - but have not included any indication of *how* they will meet the requirements. Commenters assert that given the slow progress to date, it seems unlikely that the reductions of the magnitude remaining - 70.5 tpd NOx, 11 tpd VOC and 1.3 tpd PM_{2.5} - can be achieved without a plan more focused and robust than the vague commitment to somehow get the needed reductions.

Response: We disagree. As explained in our amended proposal, the State's and District's efforts to date and their continuing efforts to reduce emissions (discussed above and in our proposed rule), indicate they are capable of meeting their specific enforceable commitments to achieve the necessary reductions by 2014. 76 FR 41562 at 41568-41572 and 41575-41577 and July 2011 TSD at Sections II.D and II.F.

Comment: Finally, for the third factor, commenters state that it is unclear with the changing landscape of many of the measures whether any of these commitments will take place within a reasonable and appropriate period of time. Commenters state that EPA fails to explain how in the context of an approval in late 2011, the state and air district will be able to complete even the requisite rulemaking process, much less actually achieve the reductions required by 2014.

Response: Commenters assume that the only path open to the State to fulfill its commitments is the adoption of new measures. We disagree. The list of measures provided by CARB in the 2011 Progress Report, Appendix B, Table B-1. represents a fraction of the rules and programs adopted and implemented by the State. See TSD Appendix A. CARB has not provided, nor has it been required to provide, an evaluation of the effectiveness of its entire control program in reducing emissions in the South Coast area. Given that the State has preliminarily demonstrated, based on a limited set of measures, that all of the needed SO_x reductions, and approximately 90 percent or more of the reductions of NO_x, VOC, and PM_{2.5} reductions needed for attainment of the 1997 PM_{2.5} standards in the South Coast have already been achieved, we believe it is reasonable to conclude that the balance of the needed reductions will also be achieved by 2014.

See 76 FR 41562, p. 41575, Table 7 and September 2011 TSD, Table F-10.

Comment: Commenters assert that although EPA has previously allowed conditional approval of SIPs based on "commitments to complete the adoption of specific enforceable measures within a short period of time," EPA has never before allowed a five-year extension of the statutory deadline for the submission of control measures yet to be specified by the State.

Response: EPA is not granting a five-year extension under section 110(k)(4) of the CAA. Rather, EPA is granting California's request for an attainment date extension to April 5, 2015 under CAA section 172(a)(2)(A). We are granting this extension of the attainment date for the reasons discussed in our amended proposal. 76 FR 41562 at 41577.

Comment: NRDC asserts that EPA is allowing the South Coast to "adjust" the 2014 baseline emissions inventory to account for California's recent slowdown in economic growth. NRDC states that the Act requires that improvements in air quality are the result of permanent and enforceable reductions in emissions.

Response: The commenters correctly note that the 2014 baseline emissions inventory in the South Coast 2007 AQMP have been adjusted to account for California's recent slowdown in economic growth. As explained in Section II.B (Emission Inventory) of

the TSD, however, CARB's revisions to the 2014 baseline inventory took into account not only updates to the State's economic forecasts but also a variety of other factors (out-of-state VMT estimates, cumulative mileage, equipment populations, load factors, and hours of use, etc.) used to calculate emissions from trucks, buses, and certain off-road equipment categories. See 2011 Progress Report, Appendix E.

The commenters' assertion that the CAA requires improvements in air quality to result from permanent and enforceable emissions reductions appears to be based on an incorrect understanding of the statutory basis for EPA's action. EPA is not determining that emission "reductions" related to the economic recession are "enforceable" measures under CAA sections 110(a)(2)(A) and 172(c)(6). Section 110(a)(2)(A) of the CAA requires that each implementation plan submitted by a State include "enforceable emission limitations and other control measures, means, or techniques... as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of [the CAA]." Section 172(c)(6) contains substantively identical requirements for all nonattainment area plans. Baseline emissions inventories, however, are not "enforceable emission limitations and other control measures, means, or techniques" or "schedules and timetables for compliance" that are necessary or appropriate to

meet CAA requirements. See *El Comite Para El Bienestar de Earlimart v. Warmerdam*, 539 F.3d 1062 (9th Cir. 2008) (concluding that a baseline inventory is not an enforceable "standard or limitation" as defined by the CAA and is not, therefore, an independently enforceable aspect[] of the SIP"). Rather, base year and baseline emissions inventories provide the basis for, among other things, the State's development of progress milestones and control strategies for attaining the NAAQS consistent with the requirements of CAA sections 172(c)(1) and 172(c)(2). See General Preamble at 13503-13510 (discussing planning inventory requirements for ozone nonattainment areas). In short, emissions inventories provide estimates of current and future emissions that, in turn, provide the starting point for the State's attainment demonstration and enforceable control strategy.

Nothing in the CAA precludes a State from revising a submitted plan to take into account revised emissions estimates and growth projections. All projections of future emissions-generating activity, including the projections in the South Coast 2007 AQMP as originally submitted, are based on projections of population, employment and other growth factors, all of which can increase or decrease as economic conditions change. However, reliance on projections from reputable sources of economic behavior based on established methods of predicting

such behavior is the historic practice for development of emissions inventories. CARB's revised projections of future emissions-generating activity are based on reputable sources, represent the most current understanding of expected economic conditions through at least 2014, and were subject to extensive public review and comment before CARB adopted its 2011 SIP revisions containing these updated projections. Given the magnitude of the economic recession's impact on emissions-generating activity in the South Coast and other parts of California, and the resulting impact on the State's assessment of the control strategy necessary to demonstrate attainment of the 1997 PM_{2.5} standards, we conclude that it is appropriate to take these updated emissions projections into account as part of our action on the South Coast 2007 AQMP and 2007 State Strategy. Other than asserting generally that CARB and EPA should not rely on the revised economic data to determine the reductions needed for attainment and that future conditions may change, the commenters provides no information to undermine the State's revised economic data or the related changes to the projected inventories.

For these reasons and as explained in our amended proposal (76 FR 41562, at 41567), we are concluding that CARB's 2011 SIP revisions, which updated the State's projected ("baseline") emissions inventories based on improved methodologies for

estimating emissions and more recent growth factors, reduced the total amount of emission reductions needed for attainment and that the control strategy in the South Coast 2007 AQMP and 2007 State Strategy, as revised in 2011, demonstrates expeditious attainment of the 1997 PM_{2.5} NAAQS in the South Coast.

G. Comments on Attainment Demonstration and Modeling

Comment: NRDC comments that the attainment demonstration cannot be approved because of changes in the inventory. NRDC states that EPA's new proposal to approve the air quality modeling in the 2007 PM_{2.5} Plan based on the supplemental documentation provided by CARB does not address the fundamental problem with the modeling, which is that the modeling fails to provide an accurate picture of whether the region will attain. EPA even admits that "Ideally, new attainment demonstration modeling would be performed to evaluate the effect of [the diesel rule updates]..." 76 Fed. Reg. at 41,573. However, the Clean Air Act does not allow EPA to approve inventories it knows to be erroneous because new modeling would be too hard. EPA must analyze how these errors in the base year inventory actually affect the attainment demonstration. EPA attempts to do this by looking at sensitivity modeling submitted by CARB, which was meant to determine the "relative effectiveness" on design values of additional reductions of NO_x and PM_{2.5} emissions in the

attainment year. EPA claims that the results of this sensitivity modeling support its conclusion that new attainment demonstration modeling would be unnecessary. The obvious flaw in EPA's reasoning is that it is calculating attainment year design value changes, to the hundredth of a percent, from attainment year design values that it has already admitted are erroneous. EPA cannot justify its failure to require updated attainment modeling by back-calculating from the wrong 2014 design values to claim that the changes to the inventory would be too small to affect the design values. Accordingly, this approach is arbitrary and capricious.

Response: While some large emission inventory changes might indeed necessitate new modeling, EPA does not agree that the inventory changes were large enough to substantially affect the modeling conclusions, or to invalidate the attainment demonstration. Ideally new modeling would be performed when an area's emission inventory is changed. However, since the cost in time and resources of remodeling and consequent reworking of a Plan is not trivial, administrative necessity requires a judgement call about when changes are large enough to merit new modeling. An important criterion in making this judgement is whether the changes would affect the conclusion that the Plan's emission reductions are adequate for attaining the NAAQS.

Another consideration is the uncertainty inherent in modeling; although model results may be reported to several decimal places, model performance goals for fractional bias are typically in the range of 30%. (EPA Guidance Appendix B) Small changes in the emission inventory are likely to have a small impact on future year design values. This is not to discount the importance of an accurate emission inventory, but rather to make the point that relatively small changes in inventory estimates do not necessarily invalidate a model application. EPA believes that the base year emission decreases due to the inventory updates are small enough to leave the overall modeling conclusions unchanged. This is a quantitative showing that the emission updates are small enough that they do not invalidate the attainment demonstration.

EPA does not agree with NRDC that starting from the Plan's modeled design values, and ending with small design value changes, constitute flaws in the procedure for estimating the effect of the baseline inventory revisions. EPA believes that results derived from model sensitivity tests are a reasonable approximation to what would result from new modeling with the updated inventory. EPA's procedure based on model sensitivity does make a number of assumptions: however, the original modeling is basically sound in how it portrays South Coast Air

Basin's atmospheric chemistry and transport. The emission changes are small enough that the model response is linear, model sensitivity is similar in the starting and ending years, and the spatial and temporal distribution of emissions is little changed with the inventory update. EPA believes that these assumptions hold well enough that the procedure provides strong evidence for the attainment demonstration's validity.

For regulatory purposes, administrative necessity requires a judgement call about whether such problems are substantial enough to compromise regulatory decisions. Years of effort by modeling experts from regulatory agencies and academia went into developing the SC modeling; it underwent successful diagnostic testing; and it performs well. EPA believes that it should not be discarded, and that it continues to constitute an adequate basis for the attainment demonstration.

As for the small magnitude of the design value changes resulting from the procedure, EPA does not believe this is a substantive issue. Any procedure (even new modeling) that starts with small emission changes will necessarily result in small design value changes: within a small range, over which the chemistry does not shift fundamentally, ambient concentrations are approximately proportional to emissions. This is not a case of an overly precise tiny number being added to a large

erroneous random number, but rather of an adjustment ratio applied to a number with a lot of solid work behind it. The emission inventory update, involving small NO_x changes, would also yield relatively small design value changes. Of course, this assumes the basic soundness of the original modeling, as discussed above.

Comment: NRDC comments that EPA should not approve the attainment demonstration because it fails to identify and address elevated PM_{2.5} concentrations in the near-highway environment. In addition, NRDC asserts that SCAQMD's monitoring network is deficient because none of the monitoring stations are within 300 meters of a major freeway.

Response: The PM_{2.5} Implementation Rule requires that states prepare attainment demonstrations through modeling that is "consistent with EPA's modeling guidance," and the modeling guidance explains that future air quality should be estimated at current monitoring sites. 72 FR 20586 (April 25, 2007); SCAQMD followed EPA's modeling guidance in developing its air quality modeling and attainment demonstration.³³

With respect to SCAQMD's monitoring network, EPA has approved previous Annual Monitoring Network Plans (2007-2010)

³³ "Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze," prepared by EPA's Office of Air Quality Planning and Standards, at 15 (April 2007).

submitted by the District and determined that the PM_{2.5} network covered under the Annual Monitoring Network Plan meets regulatory requirements. EPA's monitoring rules do not require placement of PM_{2.5} monitors in micro or middle scale locations.³⁴ The requirements for the Annual Monitoring Network Plan are found in 40 CFR section 58.10.

H. Comments on the Reasonable Further Progress Demonstration

Comment: CBE commented that the RFP demonstration is unapprovable due to shortfalls in SO₂ in 2009 and in NO_x and PM_{2.5} in 2012.

Response: Under the PM_{2.5} implementation rule, an RFP plan must demonstrate that in each applicable milestone year, emissions will be at a level consistent with generally linear progress in reducing emissions between the base year and the attainment year. See 40 CFR section 51.1009(d). The goal of the RFP requirements is for areas to achieve generally linear progress toward attainment. The RFP requirements were included in the Clean Air Act to assure steady progress toward attaining air quality standards, as opposed to deferring implementation of all measures until the end date by which the standard is to be attained. 75 FR 20586, at 20633.

³⁴ 71 FR 61236 (October 17, 2006).

As we noted in our July 14, 2011 proposed rulemaking, although the South Coast experienced a shortfall of 9 tpd for SOx in 2009, this shortfall is made up by the reductions estimated for 2012, and the area meets its 2012 SOx milestone. We note that the shortfall in 2012 for NOx is less than 1% of the 2002 baseline inventory, and the shortfall in PM_{2.5} reductions in 2012 is also about 1% of the 2002 baseline inventory, while 2012 SOx reduction milestones are met and 2012 VOC reduction milestones are exceeded by 20 tpd. (TSD, p. 116) In addition, we noted that we were not evaluating the provisions of the updated South Coast 2007 AQMP that address contingency measures for failure to meet the 2009 RFP benchmarks. Information available to EPA and the public shows that the South Coast met its 2009 RFP benchmarks for 2009 for directly-emitted PM_{2.5}, NOx, and VOC. SOx emissions are higher than the linear benchmark but achieve the benchmark levels in 2012 due to recently adopted rules controlling emissions of SOx. See 2011 Progress Report, Table C-2 and section II.H of the TSD. Therefore, contingency measures for failure to meet the 2009 RFP benchmark no longer have meaning or effect under the CAA and therefore do not require any review or action by EPA.

In addition, as noted above, the purpose of RFP contingency measures is to provide continued progress while the SIP is being

revised to meet a missed RFP milestone. Failure to meet the 2009 benchmark would have required California to revise the South Coast 2007 AQMP to assure that the next milestone was met and that the plan still provided for attainment. California has, in fact, prepared and submitted a revision to the South Coast 2007 AQMP that provides for RFP in 2012 and for attainment by 2015. (TSD, p. 122) For all of these reasons we conclude that the South Coast 2007 AQMP provides for generally linear progress towards attainment, consistent with the requirements of CAA section 172(c)(2) and 40 CFR section 51.1009. The State has also submitted a SIP revision to address the missed 2009 SOx milestone which assures that the 2012 SOx milestone will be met (the 2011 Progress Report).

I. Comments on Contingency Measures

Comment: In their January 20, 2011 comment letter, the SCAQMD agrees that the SIP must contain contingency measures that should be implemented if the area fails to meet the NAAQS by the applicable attainment date. However, the District argues that the requirement for these measures to be fully adopted in rule form at time of plan submittal is unrealistic.

Response: EPA understands that for some areas the CAA requirement for contingency measures is difficult; however, the Act is clear on these requirements. Under CAA section

172(c)(9), all PM_{2.5} attainment plans must include specific contingency measures to be implemented if an area fails to meet RFP (RFP contingency measures) and contingency measures to be implemented if an area fails to attain the PM_{2.5} NAAQS by the applicable attainment date (attainment contingency measures). These contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly without significant additional action by the State. 40 CFR section 51.1012 ("contingency measures must take effect without significant further action by the State or EPA"); see also 57 FR 13498, at 13510-11. They must also be measures not relied on in the plan to demonstrate RFP or attainment and should provide SIP-creditable emissions reductions equivalent to one year of RFP. Finally, the SIP should contain trigger mechanisms for the contingency measures and specify a schedule for their implementation. 72 FR 20586, p. 20642. We noted that the purpose of RFP contingency measures is to provide continued progress while the SIP is being revised to meet a missed RFP milestone. See 76 FR 41562, at 41580. This timely continued progress would not be possible if significant additional rulemaking action needed to be taken at the District or State level before a measure could be fully adopted and implemented. For the reasons provided in both of our proposals, we are disapproving the proposed contingency measures in the South Coast 2007 AQMP,

which include measures that are not yet fully adopted, because they do not meet the requirements for contingency measures in CAA section 172(c)(9) and 40 CFR section 51.1012. See 76 FR 41562, at 41580.

Comment: In its August 12, 2011 comment letter, the SCAQMD recognizes that the SIP must contain contingency measures that should be implemented if the area fails to meet the NAAQS by the applicable attainment date; however, they again state that they believe the requirement to have such measures adopted at the time of plan submittal is unrealistic. They point out that under the California Clean Air Act, the SCAQMD is required to evaluate all feasible measures in SIP development to achieve the maximum emissions reductions possible. Therefore, they believe it is unreasonable to expect that there are additional rules that would achieve one year's worth of RFP reductions beyond what is already adopted. Nevertheless, the SCAQMD outlines a three pronged approach to demonstrate that sufficient emissions reductions can be identified to meet the requirement for 1-year's worth of RFP reductions for contingency measures. The three prongs are (1) $PM_{2.5}$ air quality improvements have significantly exceeded the RFP milestone targets by more than one year's worth of reductions, (2) relying on continued emissions reductions beyond 2014 based on adopted regulations

for the 2007 ozone plan, and (3) quantifying excess emissions reductions that were not originally included in the 2007 PM_{2.5} SIP. The District provides additional detailed information for each of these prongs in an attachment to their comments.

Response: EPA understands the unique air quality challenges in the South Coast area and appreciates the District's efforts to identify additional measures that may serve as contingency measures for purposes of the 1997 PM_{2.5} NAAQS. We note, however, that contingency measures should consist of available control measures beyond those required to attain the standards, and may go beyond those measures considered to be RACM for the area. See 72 FR 20586 at 20643. We commit to work with the State and District to identify new or existing control measures and programs not currently included in the South Coast 2007 AQMP that may satisfy the CAA section 172(c)(9) requirements for contingency measures for purposes of the 1997 PM_{2.5} NAAQS.

Comment: In both their January 21, 2011 and August 15, 2011 comment letters, NRDC supports our proposed disapproval of the contingency measures. NRDC raises two issues related to the contingency measures. First, it asserts that the contingency measures lack enforceability. Second, they note that the District does not describe the criteria regarding how the monies in the proposed ozone nonattainment fee contingency measure will

be spent, and does not provide mechanisms for ensuring that emissions reductions are enforceable. (We address NRDC's third comment about contingency measures in relation to RACM in our responses to RACM comments above).

Response: In both our 2010 proposal and our 2011 amended proposal, we proposed to disapprove the Plan's contingency measure provisions and we are disapproving those provisions in today's action. See 75 FR 71294, 71311-71312 and 76 FR 41562, 41580. In particular, we stated the following: The South Coast 2007 AQMP includes suggestions for several measures that do not meet the CAA's minimum requirements (e.g., no additional rulemaking, surplus to attainment and RFP needs). The AQMP, however, indicates that the measures proposed by the District are not adopted, and does not quantify the expected emissions reductions in order to gauge whether they provide reductions equivalent to one year's worth of RFP. For the reasons stated above, we are disapproving the District's contingency measure provisions in the South Coast 2007 AQMP for PM_{2.5}. 76 FR 41562, at 415780 (July 14, 2011).

Regarding NRDC's second point, we agree that for CTY-02, "Clean Air Act Emission Fees for Major Stationary Sources," the District does not describe how the monies for the CAA nonattainment fees will be spent, nor does it provide mechanisms

for ensuring that emissions reductions are enforceable. These are among the reasons that we provided for disapproving this contingency measure in both our November 2010 and July 2011 proposed rulemakings. We also noted that the 2007 AQMP does not identify the quantity of emissions reductions that the District intended to use to meet the contingency measure requirement and therefore, we are unable to determine if the proposed measures are SIP creditable or sufficient to provide in combination with other measures the roughly one-year's worth of RFP needed. For these reasons, we determined that the measures submitted did not currently meet the CAA requirements for contingency measures.

III. Approval Status of the Control Strategy Measures and Enforceable Emissions Reductions Commitments

A. Approval Status of Control Strategy Measures

We describe CARB's and the District's commitments in the 2007 State Strategy (as revised in 2009 and 2011) and the South Coast 2007 AQMP in detail in our amended proposal. See 76 FR 41562, at 41575-41577. As part of its control strategy for attaining the PM_{2.5} standards in the South Coast, the District made specific commitments to adopt or revise nineteen measures for SIP credit on the schedule identified in the revised 2007 AQMP. See 2011 Progress Report, Appendix F, Tables 2 through 5. The District has now completed its adoption actions and EPA has

approved most of the adopted rules. See Table 1 below. The rules we have not yet approved we have not credited with emissions reductions in the attainment demonstration.

Table 1. Approval and Submittal Status of District Rules in the South Coast 2007 AQMP

District Rule	Adoption Date	Current SIP Approval Status
Rule 445 - Woodburning fireplaces and wood stoves	03/07/08	74 FR 27716, 6/11/09
Rule 461 - Gasoline transfer and dispensing	03/07/08	71 FR 18216, 4/11/06
Rule 1110.2 - Liquid and gaseous fuels - stationary ICEs	02/01/08	74 FR 18995, 4/27/09
Rule 1111 - Further NOx reductions from space heaters	11/06/09	75 FR 46845, 08/04/10
Rule 1127 - Livestock Waste	08/06/04	Under EPA review
Rule 1138 - Restaurant Operations	2012	Most recent approval: 66 FR 36170, 7/11/01
Rule 1143 - Consumer Paint Thinners and Multi-Purpose Solvents	12/03/10	Proposed for approval 76 FR 41744, 07/15/11
Rule 1144 - Vanishing oils and rust inhibitors	07/09/10	Proposed for approval 76 FR 41744, 07/15/11
Rule 1145 - Plastic, Rubber, Leather and Glass Coatings	12/3/04	75 FR 40726, 07/14/10
Rule 1146 - NOx from industrial,	09/05/08	Proposed limited approval/limited

institutional, commercial boilers, steam gens, and process heaters		disapproval 76 FR 40303, 7/8/11
Rule 1146.1 - NOx from small industrial, institutional, commercial boilers, steam gens, and process heaters	09/05/08	Proposed limited approval/limited disapproval 76 FR 40303, 7/8/11
Rule 1147 - NOx reductions from miscellaneous sources	12/05/08	75 FR 46845, 08/04/10
Rule 1149- Storage Tank and Pipeline Cleaning and Degassing	05/02/08	74 FR 67821, 12/21/09
Rule 2002- Further SOx reductions from RECLAIM	11/4/10	76 FR 50128, 8/12/11
Rule 2301 - Indirect Source Review	2012	
Refinery Pilot Program	Not yet adopted	N/A
SOON program	Submitted	Not yet acted on
AB923 Light and medium duty vehicle high emitter program	No rules associated with these measures	N/A
AB923 Light and medium duty vehicle high emitter program	No rules associated with these measures	N/A

As part of its control strategy for attaining the PM_{2.5} standards in the South Coast, CARB committed to propose certain

measures on the schedule identified in the 2007 State Strategy. These commitments, which were updated in the 2011 Progress Report, and their current approval status, are shown in Table 2.

Table 2. Revised 2007 State Strategy Defined Measures Schedule for Consideration and Current Status			
State Measures	Expected Action Year	Implementation Date	Current Status
Defined Measures in 2007 State Strategy			
Smog Check Improvements	2007-2009	2008-2010; 2013	Elements approved 75 FR 38023 (July 1, 2010) ³⁵
Expanded Vehicle Retirement (AB 118)	2007	2009	Adopted by CARB, June 2009; by BAR, September 2010
Modifications to Reformulated Gasoline Program	2007	2010	Approved 75 FR 26653 (May 12, 2010)
Cleaner In-use Heavy Duty Trucks	2007, 2008, 2010	2011-2015	Proposed approval 76 FR 40562, July 11, 2011
Auxiliary Ship Cold Ironing and Other Clean Technologies	2007-2008	2010	Adopted December, 2007
Cleaner Main Ship Engines and Fuels	Fuel: 2008-2011 Engines:	Fuel: 2009-2-15 Engines:	Proposed approval 76 FR 40562, July 11, 2011

³⁵ California Assembly Bill 2289, passed in 2010, requires the Bureau of Automotive Repair to direct older vehicles to high performing auto technicians and test stations for inspection and certification effective 2013. Reductions shown for the SmogCheck program in the 2011 Progress Report do not include reductions from AB 2289 improvements. See CARB Progress Report Supplement, Attachment 5.

Table 2. Revised 2007 State Strategy Defined Measures Schedule for Consideration and Current Status			
State Measures	Expected Action Year	Implementation Date	Current Status
	2008	2011	
Port Truck Modernization	2007, 2008, 2010	2008-2020	Adopted December 2007 and December 2008
Accelerated Introduction of Cleaner Locomotives	2008	2012	Prop 1B funds awarded to upgrade line-haul locomotive engines not already accounted for by enforceable agreements with the railroads. Those cleaner line-hauls will begin operation by 2012.
Clean Up Existing Harbor Craft	2007, 2010	2009-2018	Adopted November 2007, revised June 2010.
Cleaner In-Use Off-Road Equipment	2007, 2010	2009	Waiver action pending
New Emissions Standards for Recreational Boats	2013	tbd	Partially adopted, July, 2008; additional action expected 2013.
Expanded Off-Road Recreational Vehicle Emissions Standards	2013	tbd	Partially adopted, July, 2008; additional action expected 2013.
Enhanced Vapor Recovery for Above Ground Storage Tanks	2008	2009-2016	Adopted June, 2007

Table 2. Revised 2007 State Strategy Defined Measures Schedule for Consideration and Current Status			
State Measures	Expected Action Year	Implementation Date	Current Status
Additional Evaporative Emissions Standards	2009	2010-2012	Partial adoption: September, 2008 (outboard marine tanks)
Consumer Products Program (I & II)	2008, 2009, 2011	2010-2014	Approved, 74 FR57074 (November 4, 2009), 76 FR27613 (May 12, 2011), and proposed approval of 2011 rule signed September 28, 2011.

Sources: 2009 State Strategy Status Report, p. 23 (footnotes in original not included) and 2011 Progress Report, Appendix B, Table B-1. Additional information from www.ca.arb.gov. Only defined measures with PM_{2.5}, VOC, SO_x or NO_x reductions in South Coast are shown here.

Generally speaking, EPA will approve a State plan that takes emissions reduction credit for control measures only where EPA has approved the measures as part of the SIP, or in the case of certain on-road and nonroad measures, where EPA has issued the related waiver of preemption or authorization under CAA section 209(b) or section 209(e). In our July 14, 2011 proposed rule, in calculating and proposing to approve the State's aggregate emissions reductions commitment in connection with our proposed approval of the attainment demonstration, we assumed that full final approval, waiver, or authorization of a number of CARB rules would occur prior to our final action on the South Coast PM_{2.5} Plan. See 76 FR at 41562, 41575 (Table 7). Three

specific CARB rules on which the attainment demonstration relies include the Truck Rule, Drayage Truck Rule, and Ocean-Going Vessel (OGV) Rule. We proposed approval of all three rules at 76 FR 40652 (July 11, 2011), but will be unable to take final action on the rules until after taking final action on the plan because, while CARB has adopted the rules, the rules cannot take effect until approved by the California Office of Administrative Law (OAL) and such approval will not happen before EPA's final action must be taken on the plan.

We are nonetheless allowing the plan's attainment demonstration, and our final approval of it, to rely on the emissions reductions from the three CARB rules for the following reasons:

- All three rules have been adopted by CARB and submitted to EPA as a revision to the California SIP,³⁶ and the adopted versions are essentially the same as those for which EPA proposed approval;
- The comments that we have received on our proposed approval of the three CARB rules (truck rule, drayage truck rule, and ocean-going vessel rule) contend that the rules are costly and may not be economically or technologically

³⁶ The Truck Rule and Drayage Truck Rules were included in a SIP submittal dated September 21, 2011, and the OGV Rule was included in a SIP submittal also dated September 21, 2011. We have placed both of these SIP submittals in the docket for this rulemaking.

feasible, but such considerations cannot form the basis for EPA disapproval of a rule submitted by a state as part of a SIP [see *Union Electric Company v. EPA*;, 427 U.S. 246, 265 (1976)];

- The remaining administrative process, which involves review of the final adopted rules by California's Office of Administrative Law (OAL) is essentially procedural in nature, and should be completed over the near-term;³⁷
- CARB intends to submit the final, effective rules to EPA as soon as OAL completes its review and approves the rules.

Therefore, we are confident that the final action on the rules will be completed in the near term and that, as a result, continued reliance by the plan, and our final approval of it, on the emissions reductions associated with the rules is reasonable and appropriate. If, however, California does not submit the adopted and fully effective rules to EPA as a SIP revision prior to the effective date of today's action, we will take appropriate remedial action to ensure that our action on the plan is fully supportable or to reconsider that action.

³⁷ See letters from James N. Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region IX, dated September 21, 2011, submitting the Truck and Drayage Truck rules SIP revision and the OGV Rule SIP revision to EPA. CARB indicates that the Drayage Truck Rule will be submitted to OAL no later than September 23, 2011, and the Truck Rule will be submitted to OAL no later than October 29, 2011. CARB has already submitted the OGV Rule to OAL. Under California law, OAL must taken action within 30 working days.

B. Enforceable Emissions Reduction Commitments

CARB's emissions reductions commitment is to achieve the "total emissions reductions necessary to attain Federal standards" through "the implementation of control measures; the expenditure of local, State, or federal incentive funds; or through other enforceable measures." See CARB Resolution 07-28, Attachment B at pp. 3-5 and 2009 State Strategy Status Report, pp. 20-21.

The updates and improvements to the inventories as presented in CARB's 2011 Progress Report altered the calculation of the reductions needed for attainment of the 1997 PM_{2.5} standards in South Coast by revising the total reductions needed from District and State control strategy measures to 44 tpd for VOC, 129 tpd for NO_x, and 41 tpd for SO_x (the remaining reductions needed for direct PM_{2.5} remained the same at 9 tpd). See Table 3 below and July 2011 TSD, Table F-10.

We are approving the South Coast 2007 AQMP for attainment of the 1997 PM_{2.5} standards taking into account CARB's revisions to the control strategy based on the revisions to its projected baseline inventories and its enforceable emissions reductions commitment. Specifically, we are interpreting CARB's emissions reductions commitment, together with the adjustments to the 2014 baseline inventories provided in CARB's 2011 SIP revision and the District's commitments, as adjusting the State's total

emission reduction commitment such that the State is now obligated to achieve 129 tpd of NO_x, 44 tpd of VOC, 41 tpd of SO_x, and 9 tpd of PM_{2.5} reductions and reductions by 2014 through enforceable control measures to provide for attainment of the 1997 PM_{2.5} NAAQS in the South Coast. See Table 3 below. The commitment numbers in this table do not include reductions from measures adopted by CARB and the District and approved or waived by EPA following submittal of the South Coast AQMP in 2007.

Table 3. 2014 Emissions Reductions Commitments for the South Coast PM_{2.5} Nonattainment Area (tons per average annual day in 2014)					
		NO _x	VOC	Direct PM _{2.5}	SO _x
A	Adjusted 2014 baseline emissions level ¹	589	518	95	61
B	2014 attainment target level ²	460	474	86	20
C	Reductions needed from control strategy measures (A-B)	129	44	9	41
D	District commitments ³	10.8	10.4	2.9	2.9
E	CARB commitments (C-D)	118.2	33.6	6.1	38.1

¹ From TSD, Table F-9.

² See 76 FR 41562, 41573, fn 27.

³ See 2011 Progress Report, Appendix F, Table 1.

The level of emissions reductions remaining as commitments after adjusting the baseline to reflect updates and improvements to the inventories and crediting reductions from SIP-approved or otherwise SIP-creditable measures is shown in Table 4. We are approving the attainment demonstration in the South Coast 2007 AQMP to address the 1997 PM_{2.5} standards, based in part on these enforceable commitments. See 76 FR 41562, at 41577.

Table 4. Reductions Needed for Attainment Remaining as Commitments based on SIP-Creditable Measures (tons per average annual day in 2014)					
		NOx	VOC	Direct PM _{2.5}	SOx
A	Total reductions needed from baseline and control strategy measures and other adjustments to the baseline to attain	633	370	13	33
B	Reductions from baseline measures and adjustments to baseline	504	326	4	-8
C	Total reductions from approved measures	59	20	8	41
D	Total reductions remaining as commitments (A-B-C)	70	25	1	0
E	Percent of total reductions needed remaining as commitments	11%	7%	8%	0%

As shown in Table 4, the majority of the emissions reductions that the State projects are needed for attainment of the 1997 PM_{2.5} NAAQS in the South Coast by 2015 come from baseline reductions. These baseline reductions reflect numerous adopted District and State control measures which generally have been approved by EPA either through the SIP process or the CAA section 209 waiver process, in addition to the effect of the

recent economic recession on projected future inventories. See 2011 Progress Report, Appendix E and Appendices A and B of the TSD. The remaining reductions needed for attainment are to be achieved through the District's and CARB's commitments to reduce emissions in the South Coast. These aggregate commitments are shown in Line C of Table 3.³⁸ Since the submittal of the 2007 AQMP and 2007 State Strategy, the District and CARB have adopted additional measures that can be credited toward their aggregate emissions reduction commitments. The State's remaining enforceable commitments are shown in line E of Table 3.

As we noted in our July 14, 2011 proposal, we cannot credit District rules that have not been adopted, submitted to EPA, and approved (see footnote a to Table 3, 76 FR 41562, at 41570) or certain on-road or nonroad measures that have been given a waiver under CAA section 209. In our July 14, 2011 proposal, we presented a table with the State's remaining enforceable commitments (see 76 FR 41562, at 41575 (Table 7) of 70 tpd (11%) for NOx, 11 tpd (3%) for VOC, 1 tpd (8%) for direct PM_{2.5}, and 0 tpd (0%) for SOx. Today, we are slightly modifying our estimate of the State's remaining enforceable commitments for VOC. On July 15, 2011, we published a direct final rule to approve South Coast Rules 1143 (Consumer Paint Thinners and Multi-Purpose

³⁸Enforceable control measures adopted and submitted by CARB or the District and approved or waived by EPA may be credited towards this aggregate commitment.

Solvents) and 1144 (Metalworking Fluids and Direct-Contact Lubricants). See 76 FR 41744. We received adverse comments on this action with respect to Rules 1143 and 1144, and thus withdrew the direct final rule (see 76 FR 54384, September 1, 2011). We are responding to comments received on the parallel proposal but have not yet finalized that action, and therefore are adding those reductions to the State's remaining enforceable commitment for VOC. The effect of this action is to slightly increase the State's remaining enforceable commitment for VOC from 11 tpd to 24.5 tpd, an increase from 4% to 7%, and is reflected in Table 4 above. This remaining commitment is still within the range of 10% for enforceable commitments that we have historically accepted in approving attainment demonstrations.

IV. Approval of Motor Vehicle Emissions Budgets

We noted in our July 14, 2011 proposal that CARB had posted technical revisions to the motor vehicle emissions budgets on June 20, 2011 (see 76 FR 41562, at 41581 and <http://www.arb.ca.gov/planning/sip/2007sip/2007sip.htm>) to correct data entry errors in the budget calculations and to remove the emissions reductions attributable to the Assembly Bill (AB) 923 program (South Coast's light and medium duty high emitter program). In our July 14, 2011 proposal, we proposed to approve these revised updated budgets contingent on our

receiving the SIP submittal from CARB with the revised updated budgets before our final action on the South Coast 2007 AQMP addressing the 1997 PM_{2.5} standards. These revised updated budgets were submitted by CARB as a SIP revision on July 29, 2011 (see letter, James Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, dated July 29, 2011, with Attachments). We posted these budgets (as posted by CARB on June 20, 2011) on our website for adequacy on July 14, 2011 for a 30-day comment period which ended on August 15, 2011 (see

<http://www.epa.gov/otaq/stateresources/transconf/currships.htm>).

We received no comments on our adequacy posting, and have completed our adequacy review on these budgets (see the TSD, Section J). We also discuss the basis for our approval of the budgets in the TSD, Section J. We identify the budgets that we are approving today in Table 5 below.

EPA is also approving the trading mechanism in the State's submittal for use in transportation conformity analyses by SCAG as allowed for under 40 CFR section 93.124. The trading applies only to:

- Analysis years after the 2014 attainment year.
- On-road mobile emission sources.

- Trades using vehicle NO_x emission reductions in excess of those needed to meet the NO_x budget.
- Trades in one direction from NO_x to direct PM_{2.5}.
- A trading ratio of 10 tpd NO_x to 1 tpd PM_{2.5}.

Clear documentation of the calculations used in the trade would be included in the conformity analysis. See 2011 Ozone SIP Revision, Appendix A, p. A-6.

Now that the approval of the budgets is finalized, the area's metropolitan planning organization, the Southern California Association of Governments (SCAG) and the U.S. Department of Transportation are required to use the revised budgets in transportation conformity determinations. Due to the formatting of the budgets (combining emission changes, recession impacts and reductions from control measures), CARB will need to provide SCAG with emission reductions associated with the control measures incorporated into the budgets for the appropriate analysis years in future conformity determinations so that they can include these reductions per 40 CFR section 93.122. In addition, for these conformity determinations, the motor vehicle emissions from implementation of the transportation plan should be projected and compared to the budgets at the same level of accuracy as the budgets in the plan, for example emissions should be rounded to the nearest ton (e.g. 11 tpd).

Table 5. Summary of Updated PM_{2.5} and PM_{2.5} Precursor Motor Vehicle Emissions Budgets for the South Coast PM_{2.5} Nonattainment Area (tons per annual average day)

	2012			2014		
	VOC	NOx	Directly emitted PM _{2.5}	VOC	NOx	Directly emitted PM _{2.5}
South Coast Air Basin	154	326	37	132	290	35

V. Final Actions and CAA Consequences of the Final Disapproval of the Contingency Measure Provisions

A. Final Actions

For the reasons discussed in our July 14, 2011 proposal, EPA approves, with the exception of the contingency measure provisions, California's SIP for attaining the 1997 PM_{2.5} NAAQS in the South Coast nonattainment area, and grants the State's request for an extension of the attainment date to April 5, 2015. California's PM_{2.5} attainment SIP for the South Coast nonattainment area is composed of the relevant portions of the South Coast 2007 AQMP as revised in 2011 and the South Coast-specific portions of CARB's 2007 State Strategy as revised in 2009 and 2011 that address CAA and EPA regulations for attainment of the 1997 PM_{2.5} standards in the South Coast nonattainment area.

Specifically, EPA approves under CAA section 110(k)(3) the following elements of the South Coast PM_{2.5} attainment SIP:

1. the 2002 base year emissions inventory as meeting the requirements of CAA section 172(c)(3) and 40 CFR section 51.1008;

2. the reasonably available control measures/reasonably available control technology demonstration as meeting the requirements of CAA sections 172(c)(1) and 40 CFR section 51.1010;

3. the reasonable further progress demonstration as meeting the requirements of CAA section 172(c)(2) and 40 CFR section 51.1009;

4. the attainment demonstration and supporting air quality modeling as meeting the requirements of CAA section 172(c)(1) and(6) and 40 CFR section 51.1007;

5. the 2012 RFP and 2014 attainment year motor vehicle emissions budgets, as submitted by CARB on July 29, 2011, because they are derived from the approvable RFP and attainment demonstrations and meet the requirements of CAA section 176(c) and 40 CFR part 93, subpart A; and CARB's trading mechanism to be used in transportation conformity analyses as allowed under 40 CFR section 93.124;

6. SCAQMD's commitments to the adoption and implementation schedule for specific control measures and to achieve specific aggregate emissions reductions of direct PM_{2.5}, NOx, VOC, and SOx listed in Tables 1 through 5 in Appendix F of the 2011 Progress Report to the extent that these commitments have not yet been fulfilled,; and

7. CARB's commitments to propose certain defined measures, as listed in Table B-1 on page 1 of Appendix B of the 2011 Progress Report to the extent that these commitments have not yet been fulfilled and to achieve aggregate emission reductions of NOx, VOC, direct PM_{2.5} and SOx by 2014 sufficient to provide for attainment of the 1997 PM_{2.5} NAAQS as described in CARB Resolution 07-28, Attachment B at p. 3-5, the 2009 State Strategy Status Report, p. 21, and in Table 3 above.

In addition, EPA concurs with the State's determination under 40 CFR section 51.1002(c) that NOx, SOx, and VOC are attainment plan precursors and that ammonia is not an attainment plan precursor for attainment of the 1997 PM_{2.5} NAAQS in the South Coast nonattainment area.

EPA also grants, pursuant to CAA section 172(a)(2)(A) and 40 CFR section 51.1004(a), California's request to extend the attainment date for the South Coast PM_{2.5} nonattainment area to April 5, 2015.

Finally, EPA disapproves under CAA section 110(k)(3) the contingency measure provisions in the South Coast 2007 AQMP as failing to meet the requirements of CAA section 172(c)(9) and 40 CFR section 51.1012. We also reject the assignment of 10 tpd of NO_x to the federal government.

**B. CAA Consequences of the Final Disapproval of the
Contingency Measure Provisions**

EPA is committed to working with the District, CARB and SCAG to resolve the remaining issues with the SIP that make the current PM_{2.5} attainment SIP for the South Coast nonattainment area not fully approvable under the CAA and the PM_{2.5} implementation rule. However, because we are finalizing the disapproval of the contingency measure provisions in the South Coast 2007 AQMP, the offset sanction in CAA section 179(b)(2) will apply in the South Coast PM_{2.5} nonattainment area 18 months after the effective date of today's final disapproval. The highway funding sanctions in CAA section 179(b)(1) will apply in the area six months after the offset sanction is imposed. Neither sanction will be imposed under the CAA if California submits and we approve prior to the implementation of sanctions, SIP revisions that correct the deficiencies identified in our proposed action. In addition to the sanctions, CAA section 110(c)(1) provides that EPA must promulgate a federal

implementation plan addressing the deficient elements in the PM_{2.5} SIP for the South Coast nonattainment area two years after [FEDERAL REGISTER OFFICE: INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER], the effective date of this rule, if we have not approved a SIP revision correcting the deficiencies within the two years.

Because we are approving the RFP and attainment demonstrations and the motor vehicle emission budgets, we are issuing a protective finding under 40 CFR section 93.120(a)(3) to the disapproval of the contingency measures. Without a protective finding, final disapproval would result in a conformity freeze under which only projects in the first four years of the most recent conforming RTP and TIP can proceed. During a freeze, no new RTPs, TIPs or RTP/TIP amendments can be found to conform. See 40 CFR section 93.120(a)(2). Under a protective finding, however, final disapproval of the contingency measures will not result in a transportation conformity freeze in the South Coast PM_{2.5} nonattainment area.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals and partial approvals/partial disapprovals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because this partial approval/partial disapproval action does not create any new requirements,

I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. Union Electric Co., v. U.S. EPA, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the partial approval/partial disapproval action promulgated does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that

imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves a State rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable

process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045, because it approves a State rule implementing a Federal standard.

H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply,

Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as

appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA lacks the discretionary authority to address environmental justice in this rulemaking. In reviewing SIP submissions, EPA's role is to approve or disapprove state choices, based on the criteria of the Clean Air Act. Accordingly, this action merely approves certain State requirements for inclusion into the SIP under CAA section 110 and subchapter I, part D and disapproves others, and will not in-and-of itself create any new requirements. Accordingly, it does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the

Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. section 804(2). This rule will be effective on [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register].

L. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Oxides of nitrogen, Particulate matter, Reporting and recordkeeping requirements, Volatile organic compounds.

September 30, 2011
Dated:

Jared Blumenfeld,
Regional Administrator, Region 9

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52 [AMENDED]

1. The authority citation for Part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 et seq.

Subpart F - California

2. Section 52.220 is amended by adding paragraphs (c)(397), (c)(398), (c)(399), (c)(400), and (c)(401) to read as follows:

§52.220 Identification of plan.

* * * * *

(c) * * *

(397) A plan was submitted on November 16, 2007 by the Governor's designee.

(i) [Reserved]

(ii) Additional Material.

(A) State of California Air Resources Board.

(1) Proposed State Strategy for California's 2007 State Implementation Plan, adopted on September 27, 2007.

(2) CARB Resolution No. 07-28 with Attachments A and B, September 27, 2007. Commitment to achieve the total emissions reductions necessary to attain the Federal standards in the South Coast air basin, which represent 6.1 tons per day (tpd) of direct $PM_{2.5}$, 38.1 tpd of SO_x , 33.6 tpd of VOC and 118.2 tpd of nitrogen oxides by 2014 for purposes of the 1997 $PM_{2.5}$ NAAQS, as described in Resolution No. 07-28 at Attachment B, pp. 3-5, and modified by CARB Resolution No. 09-34 (April 24, 2009) adopting the "Status Report on the State Strategy for California's 2007 State Implementation Plan (SIP) and Proposed Revision to the SIP reflecting Implementation of the 2007 State Strategy," and by CARB Resolution 11-24 (April 28, 2011) adopting the "Progress Report on Implementation of $PM_{2.5}$ State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions."

(3) Executive Order S-07-002, Relating to Approval of the State Strategy for California's State Implementation Plan (SIP) for the Federal 8-Hour Ozone and $PM_{2.5}$ Standards, November 16, 2007.

(398) A plan was submitted on November 28, 2007 by the Governor's designee.

(i) [Reserved]

(ii) Additional Material.

(A) South Coast Air Quality Management District.

(1) Final South Coast 2007 Air Quality Management Plan, adopted on June 1, 2007.

(2) SCAQMD Governing Board Resolution 07-9, "A Resolution of the Governing Board of the South Coast Air Quality Management District certifying the final Program Environmental Impact Report for the 2007 Air Quality Management Plan, adopting the Final 2007 Air Quality Management Plan (AQMP), to be referred to after adoption as the Final 2007 AQMP, and to fulfill USEPA Requirements for the use of emissions reductions from the Carl Moyer Program in the State Implementation Plan," June 1, 2007. Commitments to achieve emissions reductions (including emissions reductions of 2.9 tons per day (tpd) of direct $PM_{2.5}$, 2.9 tpd of SO_x , 10.4 tpd of VOC and 10.8 tpd of nitrogen oxides by 2014) as described by SCAQMD Governing Board Resolution No. 07-9, p. 10,

June 1, 2007, and modified by SCAQMD Governing Board Resolution 11-9, p. 3, March 4, 2011, and commitments to adopt and submit control measures as described in Table 4-2A of the Final 2007 AQMP, as amended March 4, 2011.

(B) State of California Air Resources Board.

(1) CARB Resolution No. 07-41, September 27, 2007.

(399) An amended plan was submitted on May 18, 2011 by the Governor's designee.

(i) [Reserved]

(ii) Additional Material.

(A) State of California Air Resources Board.

(1) Progress Report on Implementation of PM_{2.5} State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions, Appendices B and C. Release Date: March 29, 2011.

(2) CARB Resolution No. 11-24, April 28, 2011.

(3) Executive Order S-11-010, "Approval of Revisions to the Fine Particulate Matter State Implementation Plans for the South Coast Air Quality Management Plans for the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District," May 18, 2011.

(400) An amended plan was submitted on May 19, 2011 by the Governor's designee.

(i) [Reserved]

(ii) Additional Material.

(A) South Coast Air Quality Management District.

(1) Revisions to the 2007 PM_{2.5} and Ozone State Implementation Plan for South Coast Air Basin and Coachella Valley (SIP Revisions), adopted on March 4, 2011.

(2) SCAQMD Governing Board Resolution 11-9, "A Resolution of the South Coast Air Quality Management District Governing Board (AQMD) certifying the Addendum to Final Program Environmental Impact Report (PEIR) for the 2007 Air Quality Management Plan, (AQMP), for a revision to the Final 2007 AQMP, to be referred to after adoption as the Revision to the Final 2007 AQMP," March 4, 2011.

(B) State of California Air Resources Board.

(1) CARB Resolution No. 11-24, April 28, 2011. Commitment to propose measures as described in Appendix B of the "Progress Report on the Implementation of the PM_{2.5} State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions."

(401) An amended plan was submitted on July 29, 2011 by the Governor's designee.

(i) [Reserved]

(ii) Additional Material.

(A) State of California Air Resources Board.

(1) 8-Hour Ozone State Implementation Plan Revisions and Technical Revisions to the PM_{2.5} State Implementation Plan Transportation Conformity Budgets for the South Coast and San Joaquin Valley Air Basins, Appendix A, page A-5 (dated June 20, 2011), adopted July 21, 2011.

(2) CARB Resolution No. 11-22, July 21, 2011.

(3) Executive Order S-11-016, "Approval of Revisions to the 8-Hour Ozone State Implementation Plans and Technical Revisions to the PM_{2.5} State Implementation Plan Transportation Conformity Budgets for the South Coast San Joaquin Valley Air Basin," July 21, 2011.